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Report of the

DOMINION BUREAU OF STATISTICS

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For the Fiscal Year ended March 31, 1958

DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS

CATALOGUE No.

11-201

ANNUAL REPORT

OF THE

DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1958



CANADA

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

*To His Excellency the Right Honourable Vincent Massey, C.H., Governor
General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1958.

Respectfully submitted,

A handwritten signature in dark ink, reading "Gordon Churchill". The signature is fluid and cursive, with the first name "Gordon" and last name "Churchill" clearly distinguishable.

Minister of Trade and Commerce

Ottawa, Canada
December, 1958

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REPORT OF THE DOMINION STATISTICIAN

*THE HONOURABLE GORDON CHURCHILL,
MINISTER OF TRADE AND COMMERCE,
OTTAWA.*

Sir, — The fiscal year ending March 31, 1958 was notable among other things, for the compilation and publication of the material gathered in the 1956 Census of Population and Agriculture. A number of statistical series covering economic or social factors in Canada's life were expanded while some were published for the first time. Special studies or investigations were undertaken by the Bureau at the request of various government, international and private groups.

The factual data obtained from the 1956 Census were published while a series of analytical studies was started dealing with special aspects of the Canadian economy including an examination of the methods used for taking the census. These will be released as they are completed. Planning for the 1961 Census began and liaison continued with the United States Bureau of the Census yielding ideas useful in planning future census operations.

Aside from maintaining its regular statistical services the Bureau met the problems created by the increasing demand for factual material made by industry, labour, business and private individuals. In order to meet pressure for additional, timely and comprehensive data of high quality, several new statistical series were introduced, others expanded and re-organized, and a number of special studies published.

Among the special documents released was a paper dealing with the seasonal adjustment of economic series. This paper summarized the problems and the methods used in seasonally adjusting data as well as setting out approximately seventy seasonally adjusted series regarded as critical economic indicators. For those interested in employing statistical series in the interpretation of business conditions the provision of seasonally adjusted data permits ready comparison of current monthly material with any other month in the series. Other special documents dealt with such topics as education, influenza, and phases of agricultural output.

Certain statistics were re-organized or expanded to give wider coverage thus making them more valuable to users while a number of other series were published for the first time. Among the material being released for the first time are publications concerning the greenhouse industry, broadcasting stations, motor vehicle traffic accidents and a listing of New Manufacturing establishments in Canada.

Timeliness has always been a problem especially if the quality of the data is to remain high, and during the year the Dominion Bureau of Statistics reduced the release date on reports in a number of fields among which were

vital and mineral statistics. A contributing factor in getting important material out more quickly was the co-operation of respondents in reducing reporting times, while in certain other fields alterations in processing techniques reduced the time previously taken in printing.

In order to more effectively cater to the demand for additional statistics some re-organization was made in the Dominion Bureau of Statistics. A Vocational Training Section was established in the Education Division. That section will concern itself with collecting and analysing data on vocational education and training. Within the Industry and Merchandising Division changes in the distribution of responsibility between two sections opened the way for readier development of merchandising statistics.

Co-operative service continued with departments of the federal government, international statistical agencies, provincial and municipal governments and non-government groups. Canada occupies seats on both the Statistical Commission and the Population Commission of the Economic and Social Council of the United Nations. The Assistant Dominion Statistician, Administration, served as chairman of the latter organization.

Contributions in the field of international technical assistance were continued. The Senior Research Statistician was on loan for the early part of the year to the Bureau for Technical Co-operation with headquarters in Colombo, Ceylon, where he occupied the post of Director. Fellows under Colombo Plan and United Nations' Fellowships received training in specific aspects of the work of the Dominion Bureau of Statistics.

The detailed review of the operations of the Bureau which follows indicates achievements in the various fields of statistical collection and processing with which this organization is concerned, and efforts which are being exerted to collect and process data as quickly as possible within the limits of the physical resources. The accomplishments during the past year reflect the effectiveness with which the individual members of the staff performed their day-to-day duties.

*Walter E. Duffett,
Dominion Statistician.*

Ottawa, Canada
December 5, 1958

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION

DOMINION
STATISTICIAN

PUBLICATIONS
BOARD

10-01
ASSISTANT
DOMINION STATISTICIAN
(ADMINISTRATION)

10-02
ADMINISTRATIVE
OFFICER

10-03
ADMINISTRATION

10-04
OFFICE
SERVICES
CHIEF

10-05
FORMS
CONTROL
CHIEF

10-06
STAFF
ORGANIZATION
CHIEF

10-07
COST
CONTROL
CHIEF

10-08
SPECIAL
RESEARCH
ASSISTANT

10-09
ASSISTANT
DOMINION STATISTICIAN
(STATISTICAL
INTEGRATION)
10-10
CONSULTANT
ON
CLASSIFICATIONS

10-11
SENIOR
RESEARCH
STATISTICIAN

10-01
AGRICULTURE
DIRECTOR

10-02
CROPS
CHIEF

10-03
LIVE STOCK
CHIEF

10-04
FARM
FINANCE
CHIEF

10-05
SPECIAL
PROJECTS
CHIEF

10-01
CENSUS
DIRECTOR

10-02
POPULATION
CHIEF

10-03
ANALYSIS
CHIEF

10-04
AGRICULTURE
CHIEF

10-05
MECHANICAL
TABULATION

10-01
EDUCATION
DIRECTOR

10-02
ELEMENTARY
AND SECONDARY
EDUCATION
CHIEF

10-03
HIGHER
EDUCATION
CHIEF

10-04
RESEARCH
CHIEF

10-05
ADULT
EDUCATION
CHIEF

10-06
VOCATIONAL
TRAINING
CHIEF

10-01
GENERAL
ASSIGNMENTS
DIRECTOR

10-02
FORECAST
SURVEYS
CHIEF

10-03
CORPORATION
PROFITS
CHIEF

10-04
ORGANIZATION
AND PLANNING
CHIEF

10-01
HEALTH
AND WELFARE
DIRECTOR

10-02
STATISTICS
CHIEF

10-03
VITAL
STATISTICS
CHIEF

10-04
PUBLIC
HEALTH
CHIEF

10-01
INDUSTRY AND
MERCHANDISING
DIRECTOR

10-02
MINERAL
STATISTICS
CHIEF

10-03
TEXTILES AND
MISCELLANEOUS
PRODUCTS
CHIEF

10-04
FORESTRY
CHIEF

10-05
RETAIL TRADE
AND SERVICES
CHIEF

10-06
ANIMAL
PRODUCTS
CHIEF

10-07
FISHERIES
CHIEF

10-08
INVENTORIES
CHIEF

10-09
METAL AND
CHEMICAL
PRODUCTS
CHIEF

10-10
FOODS AND
BEVERAGES
CHIEF

10-11
WHOLESALE
TRADE AND
SERVICES
CHIEF

10-01
INTERNATIONAL
TRADE
DIRECTOR

10-02
FOREIGN
TRADE
CHIEF

10-03
INTERNATIONAL
PAYMENTS
CHIEF

10-04
PRICES
CHIEF

10-05
EMPLOYMENT
CHIEF

10-06
UNEMPLOYMENT
INSURANCE
CHIEF

10-01
LABOUR
AND PRICES
DIRECTOR

10-02
PUBLIC
FINANCE
CHIEF

10-03
TRANSPORTATION
AND PUBLIC
UTILITIES
CHIEF

10-04
GOVERNMENT
EMPLOYMENT
AND PAYROLLS
CHIEF

10-01
PUBLIC FINANCE
AND
TRANSPORTATION
DIRECTOR

10-02
PUBLIC
FINANCE
CHIEF

10-03
TRANSPORTATION
AND PUBLIC
UTILITIES
CHIEF

10-04
GOVERNMENT
EMPLOYMENT
AND PAYROLLS
CHIEF

10-01
SPECIAL
SURVEYS
DIRECTOR

10-02
SAMPLING
AND ANALYSIS
CHIEF

10-03
OPERATIONS
CHIEF

10-04
FIELD
ADMINISTRATION

REGIONAL OFFICES
10-01 Montreal
10-02 Toronto
10-03 Vancouver
10-04 Winnipeg
10-05 Edmonton
10-06 Ottawa (Hull)

10-01
INFORMATION
SERVICES
DIRECTOR

10-02
PRESS AND
PUBLICITY
CHIEF

10-03
LIBRARY

10-04
CANADA
YEAR BOOK
CHIEF

10-01
MECHANICAL
TABULATION
DIRECTOR

10-01
RESEARCH AND
DEVELOPMENT
DIRECTOR

10-02
NATIONAL
INCOME
CHIEF

10-03
BUSINESS
STATISTICS
CHIEF

10-04
SPECIAL
PROJECTS
CHIEF

*Includes statistics on Federal,
Provincial and Municipal finance.

DOMINION BUREAU OF STATISTICS

Chart showing organization

March 31, 1958

ADMINISTRATION DIVISION

Staff Organization

The Personnel Section is concerned with problems relating to establishment of positions, recruitment, pay, promotions and reassignments of staff and related matters. In carrying out the work of this Section close liaison is maintained with the Civil Service Commission.

The regular staff on strength at March 31, 1958 was 1,560, an increase of 111 over the 1957 total for the same date. During the year there were 335 additions to staff and 224 separations. For the 1956 Census staff there were 11 assignments and 76 separations. At the close of the year the total 1956 Census temporary staff numbered 24. During the year 124 promotional competitions were conducted by the Dominion Bureau of Statistics.

The Suggestion Award Committee received 47 suggestions during the year. The distribution of suggestions processed during the same period was: 5 approved; 35 rejected; and 7 under consideration.

Health Unit No. 12

The Civil Service Health Division of the Department of National Health and Welfare operates a local Health Unit in the D.B.S. which is responsible for servicing all government buildings in the Tunney's Pasture area. This unit maintains close liaison with the Personnel Office.

Visits by D.B.S. employees to the Health Unit during the year numbered 14,369 as compared with 16,197 during the preceding year.

Employees requiring medical examination and special investigation are referred to their family physician or to the Health Centre of the Civil Service Health Division where complete advisory and diagnostic services are available.

Office Services

The work of the Addressograph Sub Unit increased over the previous year. The number of forms addressed numbered 8,341,360; plates embossed numbered 474,053, a total of 309,664 plates were deleted and corrections were made on 76,251 plates.

During the period under review a total of 1,540 plans, maps and charts were completed by the Drafting Unit.

The Composing Unit planned, vari-typed and prepared for printing some 13,000 pages of tabular and textual material. In addition, 2,581 hours were devoted to miscellaneous vari-typing on forms. These 2,581 hours represent a theoretical production of 1,518 pages of publication (based on the current average of 1.7 hours per page) bringing the Unit's total production to some 14,600 pages.

A total of 16,008 bags containing approximately 5,723,735 pieces of mail were deposited with the Post Office for a total cost of \$7,576. Internal and indepartmental messenger service was also provided by the staff of the Mail and Messengers Sub Unit.

Requisitions were handled by the Office Services Unit and during the fiscal year 1957-58, 221 requisitions were raised on the Department of Public Works for goods and services for which they are responsible. During the same period 231 requisitions were reported as completed.

The Supplies Sub Unit submitted a total of 615 printing and stationery requisitions to the Department of Public Printing and Stationery for a value of \$343,238. Issues of postage stamps during the year amounted to \$13,438.

The Stenographic Pool provided stenographic service for the various Divisions including transcription of letters from dictation and typing of plastiplates, statements, lists, etc.

During the year letters transcribed from dictation numbered 2,475 and 25,586 pages of miscellaneous typing were done. In addition numerous form letters were completed and envelopes addressed.

Members of the staff of the Pool were on loan to several offices throughout D.B.S. for a total of 70½ days for which no stated amount of work could be recorded for them.

Cost Control

The Cost Control Section prepares the annual estimates of funds required for the operation of the Dominion Bureau of Statistics. In addition this Section prepares accounts for submission to the Treasury Office of the Department of Trade and Commerce for payment, operates the Commitment Control of expenditures, and maintains records of operating costs by Divisions and Sections.

During the fiscal year 1957-58 funds for operations were provided through the Main Estimates, by transfers of funds from the General Salaries Vote of the Department of Finance for the general revision of salaries which became effective May 1, 1957, and through the Final Supplementary Estimates which were submitted during January 1958. Supplementary Estimates were required primarily because of increased printing costs, but also to meet salary increases and the increased rental of punched card tabulating equipment which became effective from June 1, 1957. The Supplementary Estimates applied to the Statistics Vote only. Additional funds for salaries which were required for the Administration and Census Votes were made available from the Department of Finance General Salaries Vote.

The expenditures, during 1957-58, in connection with the 1956 Census of Canada should be sufficient for the completion of work in connection with this Census, with the exception of an estimated \$7,000 to be expended during 1958-59 for the completion of the printing of reports.

Further analyses were made on field accounts for the 1951 and 1956 Censuses for reference in preparing estimates for the 1961 Decennial Census.

Forms Control

Approximately 2,350 forms, constituting 5,950 pages, were submitted to the Forms Control Section during the year. Of these, 500 were reprints,

1,200 revisions and 650 new or substantially altered designs. To facilitate the procurement of reprints, a negative file covering all forms, was established in the Section.

As the result of a methods study, the punch card system of recording forms and publications costs was revised to reduce time spent in manual preparation of data for punching.

The Section conducted office payout studies in connection with the relocation of several of the Sections in D.B.S.

During the latter part of the year work began on a proposed system of indexing Bureau publications.

A member of the Section represented the Bureau on the Government Committee on Standardization of Forms and the several working sub-committees.

Advisory Board of Publications

The Advisory Board of Publications held seventeen meetings during the year. The number of meetings held denotes the unusually heavy schedule with which the Board was faced. The main reasons for the increase in the work of the Board was the special considerations which arose in connection with cataloguing and indexing of publications.

Close liaison has been maintained with officials of the Department of Public Printing and Stationery in establishing a revised catalogue for Dominion Bureau of Statistics publications.

A new masthead for the *Daily Bulletin* and the *Weekly Bulletin* was approved and in conjunction with its appearance it was decided that greater use should be made of these Bulletins as promotion media in the distribution program. Prices for the Bulletins were revised, and a form for the convenience of persons wishing to order publications was added on the final page of each edition.

During the year several working documents were released which are of limited interest and are therefore not supplied as general publications. The fact that these are available is made known to persons working in the fields which they concern. The results of a number of special studies were prepared and released for general distribution. These included: *Seasonally Adjusted Economic Indicators, 1947-1955*; *Incomes, Liquid Assets and Indebtedness of Non-farm Families in Canada, 1955*; *Handbook of Agricultural Statistics – Part IV*; *Statistical Review of Canadian Education, Census, 1951*; *Influenza in Canada – Some Statistics on Its Characteristics and Trends*.

Several publications of a continuing nature were released for the first time during the year. Included in this group were: *Greenhouse Industry*; *Credit Outstanding*; *Electric and Gas Meter Registrations*; *Salaries and Qualifications of Teachers in Universities and Colleges*; *New Manufacturing Establishments in Canada*; *Radio and Television Broadcasting Statistics*;

Motor Vehicle Traffic Accidents; Production, Consumption and Inventories of Pulpwood; Specified Household Electrical Appliances; Air Conditioning and Refrigeration Equipment; Meat and Meat Preparations.

The report on *Electric Railways* was discontinued due to the decreasing importance of this mode of transportation. Relevant statistics concerning electric railways will be incorporated into the reports on *Urban Transit* and *Railway Transport*.

The Board considered a number of suggestions which were received from subscribers regarding various phases of the publishing program. These suggestions have been implemented in cases where changes appeared feasible.

General Committee on Classifications

Under the guidance of the Consultant on Classifications the General Committee continued work on the revision of the Standard Industrial Classification Manual which was published in 1948. Prior to final printing the proposed revision will be distributed to users outside D.B.S. who will be invited to present comments and suggestions.

In addition to the revision of the *Standard Industrial Classification Manual* final work on the *Standard Commodity Classification Manual*, including the preparation of a detailed alphabetical Index of products has been carried forward. The Index items have been obtained from lists such as the United States Classification of Commodities Exported (Schedule B) and the Tariff Nomenclature of the Customs Co-operation Council in Brussels as well as special trade manuals and advice and assistance from trade and industry associations and business firms. When the classification is introduced for statistics of exports and imports, the Index will be particularly useful as an aid to the coding clerks who will be using an unfamiliar classification system.

The Consultant on Classifications attended the 9th International Conference of Labour Statisticians held in Geneva from April 24 to May 4, 1957. He was Chairman of the Committee on Occupational Classification and also attended the meetings of the Committee on Classification by Status.

AGRICULTURE DIVISION

The functions of the Agriculture Division include the determination of statistical items to be collected from the agriculture industry, the collection and compilation of current data, the preparation of reports and the answering of inquiries. These reports and inquiries are concerned with production, distribution and use of agricultural products, quantities and cost of goods and services used by farmers, and the income accruing to farmers.

Statistics concerning the agriculture industry and commodities produced are not all collected by the Dominion Bureau of Statistics. The Board of Grain Commissioners and the Canada Department of Agriculture in the

course of their regular work provide commercial marketing data for grains, seeds and a number of livestock and livestock products. Within the Bureau, the Census Division collects data on the structure of the industry, and Divisions other than Agriculture collect data on prices and utilization of farm products. The Agriculture Division is responsible for collection of current data at the farm level. Surveys of some agricultural manufacturing plants, such as dairy factories and flour mills are conducted monthly on a full-coverage basis. The mail-questionnaire method of collection is used and most of the farm surveys are non-random in character and provide information on changes taking place. Specific instances of surveys are: the June and December crop and livestock surveys from which estimates of crop acreages and numbers of livestock are made; seasonal crop surveys (field crops, oil seeds, fruits and vegetables); monthly farm prices; poultry, dairy, fur farm and hog surveys. For the dairy factory surveys and some of the farm surveys, the provinces co-operate with the Dominion Bureau of Statistics in the collection and tabulation of data.

New developments within the past year in the Crops Section include more intensive research into methods of estimating stocks of grain on farms. New schedules were designed and tested and questions were added to the June crop survey to broaden the base of the inquiry. A new survey was introduced in Saskatchewan to ascertain the proportions of the more important crops sown on summer fallow, and also yields from summer fallow land in comparison with those from stubble land. In special crops work, a new statistical committee was formed with the Canadian Horticultural Council to aid the Dominion Bureau of Statistics and the industry in further improving statistical services for fruits and vegetables.

Further progress was made in the Livestock Section in simplifying schedules used for gathering statistics on the fluid milk trade and on ice cream production. A revised schedule was introduced for collection of fur farm statistics in co-operation with the Canada Mink Breeders' Association.

A new Section, Special Projects, was established embracing the former Research Unit and the newly created Farm Survey Unit. Developmental work relating to collection of data on farm income and expenditure by interview sample surveys was carried on by the Farm Survey Unit working co-operatively with other Divisions in the Bureau and with other Departments, particularly the Canada Department of Agriculture. Field tests were completed in two areas in Manitoba in November 1957 and in two areas in Ontario in February 1958 to obtain evidence on response rates and attitudes, time and mileage costs, and the suitability of questionnaires covering detailed farm business expenses, farm-family income and farm-family living expenses.

The Research Unit participated in the above developmental work, particularly in the appraisal of sample design. Technical Assistance was given to the Crops Section in the study of the reliability of the July 31 survey of stocks and grains on farms. The processing of returns and the calculation of sampling error was completed for the newly instituted Chrysanthemum survey. Direct assistance was provided for intercensal revisions of crop acreage estimates 1952-56. The Section also provided liaison in connection

with construction of farm mailing lists based on the 1956 Census and in the conversion of Census data to a crop-district basis in Manitoba and Saskatchewan.

The Farm Finance Section includes the Compilation Unit and Farm Finance Unit both formerly under the Research Section. The Compilation Unit processed some 180,000 questionnaires returned by farmers in the June and December surveys. In addition, returns from three of the Atlantic Provinces were compiled at the Agriculture Division office at Truro, Nova Scotia. In October 1957 a mail-questionnaire survey of certain crops and livestock in Newfoundland was conducted by the Dominion Bureau of Statistics. Results were not completely satisfactory and further discussions with Newfoundland officials are necessary to plan an effective system for carrying out a continuous program.

Progress was made during the year in intercensal revisions of crop, livestock, dairy and farm finance statistical series. Study of the 1956 Census returns was also carried out to devise improvements in estimating procedures for current surveys.

A conference on Dominion and Provincial Agricultural Statistics was held in December 1957, the chief topic at this meeting was statistics of poultry and egg production and marketing. Officers of the Division served on several committees during the year, the chief of which were Sub-committees of the Interdepartmental Committee on Agricultural Statistics, Interdepartmental Wheat and Grain Committee, the Department of Agriculture Situation and Outlook Committee, the Advisory Committee on Agricultural Services and the Interdepartmental Food and Agriculture Organization Committee.

In addition to the regular publications, 22 reports in the Crop Reporting series, 9 reports in the Fruit and Vegetable Production series, 2 reports on Honey, one Maple Products report, one memorandum on Nursery Stock Sales and one compilation showing per capita supplies of food available for consumption were published. The regular issues of the *Quarterly Bulletin of Agricultural Statistics* contained sections covering the various data collected by the Division. Annual reports on statistics of livestock and animal products were published as were reports on income from farming operations.

CENSUS DIVISION

The main function of the Census Division is to plan, take, compile and publish the results of the Decennial and other censuses of Canada. In addition, proof of age from early census records is provided for persons who cannot otherwise furnish satisfactory proof of their age.

The activities of the Census Division during the fiscal year ending March 31, 1958 were concerned primarily with the compilation and publication of the results of the 1956 Census of Population and Agriculture. A total of 48 reports dealing with Population, Households and Families, and informa-

tion on Agriculture for the various territorial divisions of the provinces were prepared and published. This series includes a set of maps showing the boundaries of the territorial divisions and statistics for the census tracts in 15 of the major urban areas. To supplement the statistical reports which were published, a number of analytical studies on the various subjects were commenced and these are to be published as completed. Included in this series will be an analysis of the methods for taking the census, including the changes from the methods used in 1951.

Following the publication of the reports a number of studies on the methodology of enumeration, processing and classification were undertaken in order to determine the effectiveness of the newer methods and to assist in the planning for the 1961 Census.

During the year the regular series of estimates of the population (quarterly, semi-annual and annual) and the regular annual reports were prepared and published. Tabular and textual material on Canadian citizenship statistics was prepared for inclusion in the report of the Department of Citizenship and Immigration. Some 48,500 requests were received for verification of age from early census records and for information from National Registration records. The 1956 Population Census documents were microfilmed and both the positive and negative films checked and filed for future reference. The preparation of microfile cards from the 1921 Census Alphabetic Index was continued.

A meeting of the main committee of the Canada-United States Census Study Organization was held in Washington in November at which a number of the senior officers of the Division discussed the methods used in recent censuses and listed specific problems for study by the sub-committees.

Members of the staff took part in the training of 16 Colombo Plan and United Nations Fellows during the year.

Representatives of the Division observed a special census in Yonkers, New York, and, among other topics, discussed methods of estimating internal migration with officials of the U.S. Bureau of the Census.

Census Executive Committee

The fiscal year ended March 31, 1958 saw the completion of the work of the 1956 Census Executive Committee with the publication of the final Census report.

In preparation for the 1961 Census, a new Committee was formed, together with a number of working sub-committees. While the central committee is concerned chiefly with matters of policy, it serves also as a clearing house for all census planning. The various working committees are responsible for details of organization and procedure, as well as for subject matter in the fields of population, agriculture, housing, field organization, distribution, fisheries, tabulation and publication. Lists of questions which were compiled by these committees have been forwarded to technical advisers in government and in business for comments and suggestions. Certain

questions which by their nature pose problems for the enumerator have been pretested in the field, and it is planned to conduct further tests in the coming months.

Various aspects of field organization have been discussed by the Committee. Plans have already been set in motion toward the delimitation and description of the 1961 Census enumeration areas and the improvement of mapping services and a number of possibilities have been explored with a view to increasing completeness of coverage and efficiency of supervision in the field.

Considerable study has been made with regard to the type of tabulating equipment to be used in 1961, but as yet no final decision has been made. On the outcome of this decision rests the pattern of planning in relation to other aspects of the census operation.

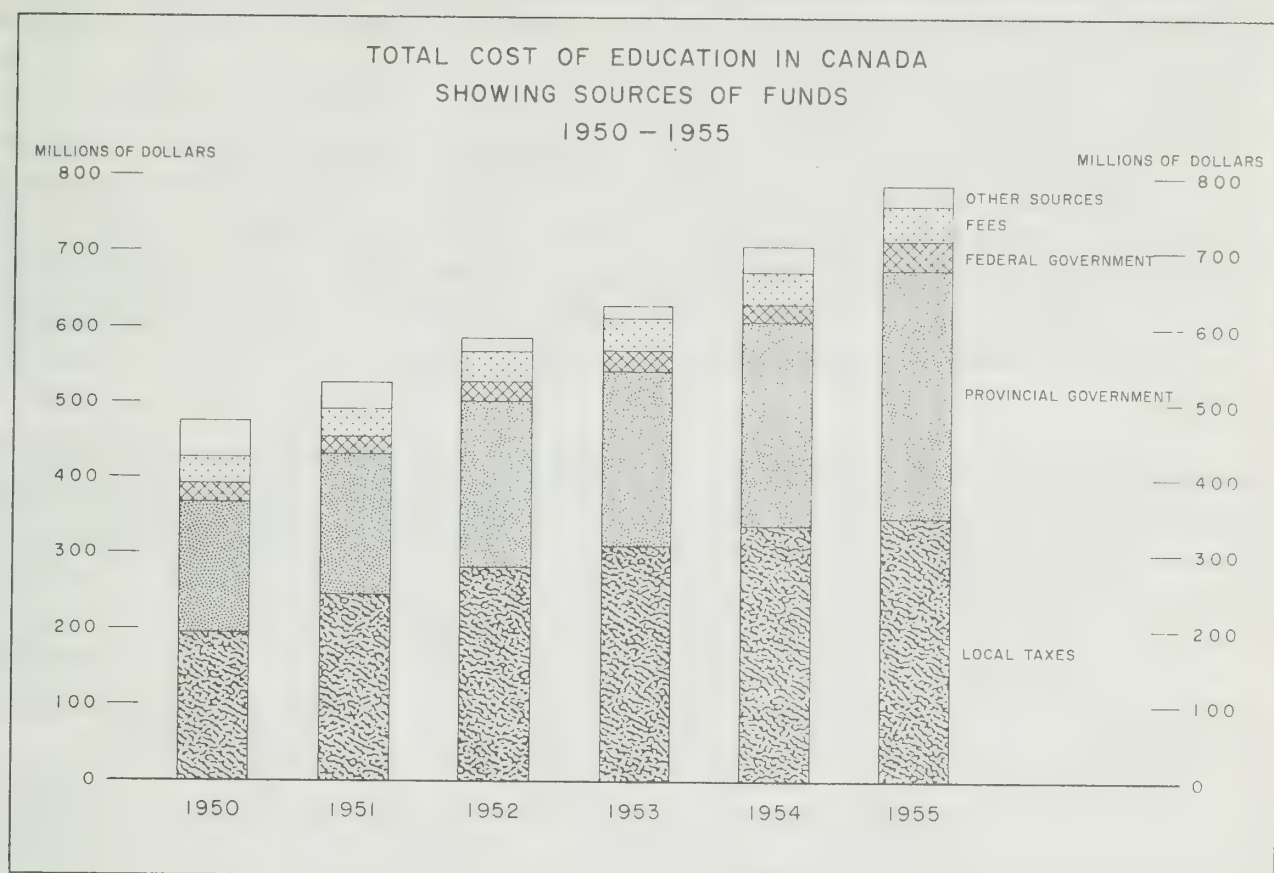
As in the past, there has been close liaison with the United States Bureau of the Census. Meetings have been held in both Washington and Ottawa during the past year which have been mutually helpful in the discussion of census problems and exchange of ideas. Committee members have participated as observers in certain of the United States pretest operations, and an exchange of technical papers and committee reports has been maintained between the two countries.

EDUCATION DIVISION

The Education Division collects, compiles and prepares for publication statistics of public and private elementary and secondary schools, vocational training schools, colleges and universities, adult education and other cultural activities. Principal types of data reported are those on numbers and types of establishments; numbers, salaries and qualifications of staff; numbers, levels and activities of participants; and revenue and expenditure.

The statistics of schools under public control are obtained from the administering authorities, chief of which are the provincial departments of education, the superintendent of education in the Yukon Territory, and the federal departments of Northern Affairs and National Resources (schools in the Northwest Territories and for Eskimos in Quebec and Labrador), Citizenship and Immigration (Indian Schools) and National Defence (servicemen's dependants' schools in Canada and Europe). In most cases, statistics of colleges and universities and of private schools are obtained by D.B.S. directly from the institutions concerned.

Co-operative relations are maintained with interested departments and agencies of the Government of Canada, provincial departments of education and such national education associations as the Canadian Education Association, the Association Canadienne des Educateurs de Langue Francaise, the Canadian Teachers' Federation, the National Vocational Training Ad-



visory Council, the National Conference of Canadian Universities, the Canadian Association of University Teachers, the Canadian Association of University Business Officers, the Federation des Colleges Classiques, the Canadian Library Association, the Canadian Association for Adult Education, the Canada Foundation, the Industrial Foundation on Education, the National Advisory Committee on Educational Research, the Canada Council and the Canadian National Commission for Unesco. In the international field, the Division works closely with the U.S. office of Education and with Unesco.

In addition to preparing annual reports on activities in the various fields of education and occasional papers on specific topics the Division responds, insofar as resources permit, to requests for special compilations, articles, papers and talks.

Examples during 1957-58 included: compilation of university enrolment by faculty and graduating year at November 1, a list of private residential schools in Canada, statistics of private elementary and secondary schools, and statistics of business colleges. Articles were prepared on "*Statistics of Canadian Education*", "*How much? How Many? — a Note on the Role of Education Statistics*", "*Income and Expenditure of University and College Students*", and "*All This and Figures Too*" (concerning private non profit libraries serving the public). These articles were published by various periodicals produced by education associations, etc. Preliminary data, to be published in more detail later, were released on the income and expenditure of university students, public library services, librarians' salaries and qualifications, and the schooling of handicapped and other exceptional children.

The large volume of individual inquiries which were handled during the year tended to reflect concern current regarding Canadian education. These inquiries included requests for data related to future enrolments and the needs of schools, colleges and universities for additional facilities, staff and funds; for statistics on the retention and drop-out of students; for figures on student aid; for data on the potential supply of professional manpower, especially of scientists, engineers, teachers and nurses; for technical training data, particularly at the post-secondary level; and for information about the schooling of exceptional children. Every year there are numerous requests for comprehensive information about the Canadian systems of education.

During the year a Vocational Training Section was added to the Division. This Section is concerned with statistics of vocational education and training in public and private secondary schools, trade schools, apprenticeship programs and technical institutes, and professional training outside the universities. From the time of his appointment to the end of the fiscal year the Chief of this Section worked with officials of the Department of Labour's Vocational Training Branch in the preparation of a comprehensive report on industrial and technical training in schools under provincial control.

Series of detailed statistics on Indian schools were begun during the year in co-operation with the Education Division of the Indian Affairs Branch, Department of Citizenship and Immigration. The first issue of a new series of annual reports on the *Salaries and Qualifications of Teachers in Universities and Colleges* was published. An analytical reference paper entitled *Statistical Review of Canadian Education, Census 1951* was in press at the close of the period, and progress was made on the preparation of a select bibliography on Canadian education.

GENERAL ASSIGNMENTS DIVISION

The main function of the General Assignments Division is to provide estimates of construction activity in Canada, estimates of current and intended capital expenditures covering both the private and public sectors of the economy, and to make available estimates of profits and related financial information of Canadian corporations on a quarterly basis. The Division also, through a co-operative arrangement with seven interested provincial government departments, co-ordinates the work of providing up-to-date information on new manufacturing establishments starting operations in Canada. In addition to these continuing functions, the Division undertakes a variety of *ad hoc* assignments for other government departments and agencies and lends assistance in the preparation of data for specific jobs.

During the past year a survey of mortgages and agreements of sale held in estates, trusts and agencies was completed for Central Mortgage and Housing Corporation and a survey of industrial research-development expenditures was undertaken in co-operation with the National Research Council. About 2,750 of the larger corporations were surveyed to investigate the magnitude and direction of the research-development program undertaken by

Canadian industry in 1957 and to provide an indication of the relative size of the 1958 program. The survey also sought information on expenditures made directly by the companies, purchases of research results, the number of scientists and technicians employed and the principal fields of activity. This survey was last conducted to cover the years 1955 and 1956.

The survey of new establishments continued throughout the year with about 9,500 prospective new plants contacted. Information collected on new manufacturing establishments was published in June and December 1957 in memoranda which included the names, addresses and principal products of over 3,000 new establishments.

To meet the increasing demand for information on the financial aspect of pension plans, preparation was made for a survey of almost 1,000 firms operating trustee pension plans. This survey, conducted for the first time by the Research and Development Division for the year 1953, is to be repeated annually in the General Assignments Division.

The monthly series of reports on Building Permits as issued by Canadian municipalities was continued during the year, and the first full year of publication was completed with the issue for December 1957. Further work is being conducted to make more information on building permits available. The publication of data on a similar basis for comparative purposes, covering the years 1951 to 1956, was released during the period. A number of municipalities were also surveyed to determine if building permits were required and, as a result, future publications will include data for about 125 additional areas.

The publication *Private and Public Investment in Canada, Outlook 1958* was released early in March and the supplement setting out data for the provinces and selected metropolitan areas was completed later in the same month. In July, revised estimates of intended capital expenditures for the year 1957 were published. The qualitative portion of the questionnaire was expanded to give more useful information regarding the progress of the program or difficulties encountered.

Information on types of structure for 1955 and 1956 and a forecast of outlays expected to be made during 1957, on a wide variety of buildings and engineering structures, was prepared and published.

Quarterly reports setting forth estimates of profits, depreciation, taxes and sales of Canadian incorporated companies, except government-owned corporations and incorporated co-operatives, were issued throughout the year. These reports covered twenty-one industrial groups, thirteen of which were in the manufacturing industries. During the year work continued on improving the coverage of the sample survey and in investigating the possibility of providing greater detail.

HEALTH AND WELFARE DIVISION

The Health and Welfare Division provides an annual statistical assessment of the health of the Canadian population through the portrayal of current patterns of mortality, hospitalization and the mass behaviour of illness and of certain diseases in the general population. These data are derived from records of births, deaths, marriages, notifiable diseases, hospitals and similar sources. Since the maintenance of health services is mainly the statutory concern of the provincial governments the Division works closely with appropriate provincial departments both in the collection of source data and in the presentation of the published statistics. While much of the published data contained in the Division's publications are essentially in primary form considerable progress has been made, and is continuing, in extending and strengthening the analytical treatment of the basic series.

This development has been most evident in the field of vital statistics, where a program of analytical reports, launched the previous year, gained further momentum. In other fields stronger attention has first had to be directed toward re-evaluating and improving the quality of the existing statistics. The emergence of firm dates for the entry of the federal government into the field of hospital insurance required a complete overhaul of the statistical schedules for hospital returns, culminating in Dominion-Provincial agreement on the information to be collected in future. Negotiations were in progress at the year-end on the precise nature of the Division's future program in this field. In morbidity statistics the continuing tabulation work on the Sickness Survey produced further important new information on the incidence and prevalence of illness. Concurrently a significant contribution to statistical methodology was made with the preparation of a document outlining proposed concepts and definitions for use in morbidity statistics. Also, plans were made to obtain current bench-mark data on disabling illness through the inclusion of a brief question in the 1961 Census.

Despite progress on these several fronts, variations persist in the scope, coverage, comparability and quality of the statistics for which the Division is responsible, and in their adequacy to meet current requirements. The vast new health and social welfare programs which have come into being in such a remarkably short time in recent years have called for a dynamic expansion of accompanying statistical services which it has been impossible to implement with the available staff resources. Staff resources have accordingly had to be concentrated on the correction of imperfections in the collection and analytical aspects of existing series.

Public Health

The Public Health Section has two main functions—to provide a broad statistical measure of the nation's health and health services, and to produce statistics concerning specific health problems. Both these types of statistics are important, but in terms of magnitude general health statistics have continued to be the Section's biggest project both with respect to the volume of work and to the technical and administrative problems involved. The *Sickness Survey*, Canada's first venture into this field of general health sta-

tistics, has reached a point where the basic results have become available for the first time in Canada, although much detailed information lies as yet untapped in the record files. In order to evaluate this Survey, to assess the continued usefulness of further work on it, and particularly to contemplate future similar assessments of Canada's health, a Dominion-Provincial Conference on Morbidity Statistics was held during the year with wide representation from government and non-government agencies. The need for a continued processing of Sickness Survey data was emphasized and the planning for future similar studies to be undertaken by the Section will be assisted by a continuing committee recommended by the Conference.

Progress has been made in adapting communicable disease reporting to present day requirements. With the development of health services in the northern areas of the country, these regions are being covered gradually by a system of statistical reporting. In the expanding field of industrial health statistics the Section has been able to contribute to the study of methodology by introducing new concepts into its study of illness in the Civil Service of Canada and by refining the resulting statistical reports. As a result of this continuing study it was possible to produce current statistics on the course of the Asian influenza epidemic and to transmit this information to the agencies concerned.

The advent of the public hospital insurance programs with its growing interest in home care facilities has prompted interest in home nursing statistics. The implications of newly developing plans for the implementation of such services, under provincial auspices, on the statistics collected are being studied.

Close collaboration has been maintained throughout the year with corresponding Divisions in the Department of National Health and Welfare.

Vital Statistics

During the year further progress was made in forwarding the 1956 vital statistics to the provinces at an earlier date, reducing by close to three weeks the time previously required. This improvement in timeliness has come about as the result of concentrated efforts over the past few years to obtain earlier returns from the provincial authorities (which in turn involves earlier returns from local registrars in the field) and the complete streamlining and scheduling of tabulation procedures in the Dominion Bureau of Statistics in consultation with the Mechanical Tabulation Division. The time saved is now being utilized for the preparation of special research tabulations which previously could not be undertaken.

To meet recurring requests for information in certain fields of vital statistics the publication of special reports has been continued. These reports briefly summarize historical trends and discuss the age and sex impact of particular causes of mortality. During the year four such reports were published and two were submitted for printing. The reports covered the following topics: *Causes of Stillbirth*, *Leading Causes of Death by Major Age Groups*, *Accidental Drowning*, *Mortality from Accidental Falls*, *Mortality from Accidental Poisoning*, and *Mortality from Home Accidents*. At present,

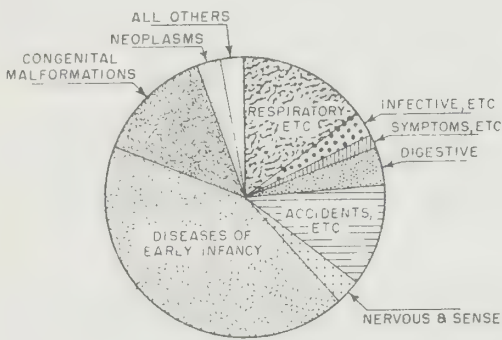
research work is proceeding with studies on mortality from cancer, heart disease and motor vehicle accidents, and with selected aspects of fertility. Consumer reaction to this series of reports has been very encouraging and a great deal of time has been saved by having the data prepared in advance in printed form.

CAUSES OF DEATH AND OF ILLNESS

AGE GROUPS

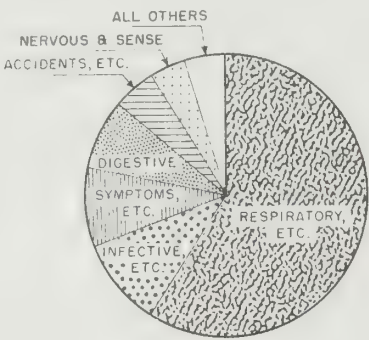
DEATH

1957 VITAL STATISTICS

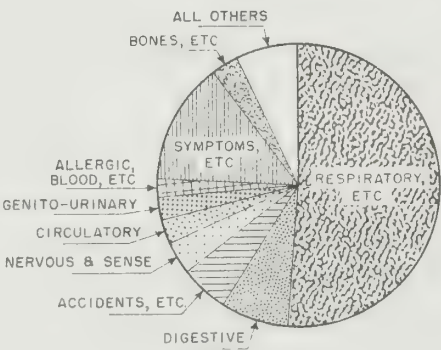
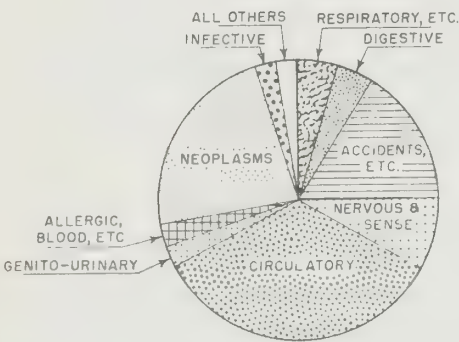


ILLNESS

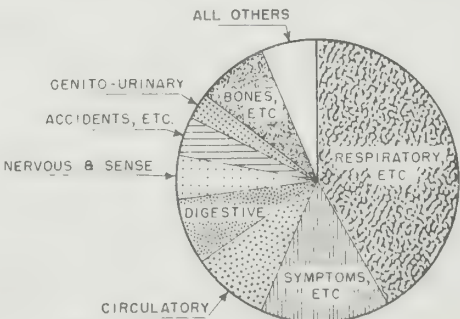
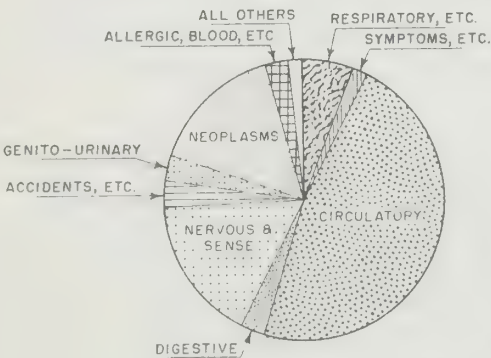
(1950-51 CANADIAN SICKNESS SURVEY)



15-64



65 AND OVER



In order to meet ever increasing demands for early release of current data on causes of death, the 1956 preliminary report was expanded from two to eight pages with the inclusion of two additional tables on deaths and death rates by cause for each province. The historical tables of the annual report were thoroughly revised to include, wherever possible, data for the Yukon and Northwest Territories and this unfortunately delayed publication. The analytical introduction to the report has created an increased demand which has led to an increase of 200 copies in the printing run.

The geographical codes relating to urban areas and to counties or census divisions, which are used for vital statistics purposes, were revised in consultation with the provincial authorities, immediately following the release of final 1956 Census results. Further progress in connection with coding was made in arranging for provincial offices to assume responsibility for geographical precoding of records on behalf of the Bureau with the object of progressively reducing Bureau coding staff. Additional simplification of coding procedures is being studied with a view to further economies.

Current monthly indexes of births, marriages and deaths were routinely supplied to the Family Allowances Administration and the appropriate provincial offices as has been the practice since 1946 when Family Allowances were initiated. A concerted effort was made, in collaboration with the Mechanical Tabulation Division, to complete some outstanding projects relating to the consolidation and retabulation of the birth indexes for certain provinces.

The meeting of the Vital Statistics Council, in June, threw some additional burdens on the staff of the Section, especially with regard to administrative and legal problems relating to registration of vital events. These involve a review of the forms used for registration, the clearing of definitions and amendment of model legislation, and other problems of a similar nature referred to D.B.S. by the Council for study and investigation. In addition, at the request of the Council, the Section continued its investigation into various reproduction methods adaptable to vital records, and into the efficiency of the present method of indexing.

Institutions

The function of the Institutions Section is the statistical measurement of hospital accommodation, services, utilization, personnel and finances and the nature of hospitalized mental illness and tuberculosis. Improvements in the timeliness and quality of the data prepared by the Section were effected during the year, but these were not as extensive as had been hoped for due largely to the problem of late reporting by hospitals. However, at the end of the fiscal year there was evidence of more prompt reporting by hospitals of data for 1957 than in the previous year. A modest acceleration in publishing the two comprehensive annual volumes on hospital statistics, general and financial, was achieved although it has still not been found possible to issue either of these within the calendar year immediately following. For this reason it was necessary to make available prior to formal publication certain financial data required for hospital cost estimates in connection with hospital insurance planning.

In the field of tuberculosis statistics a dropping off in the number of admissions to sanatoria, coupled with earlier return and a speed-up in processing permitted the publication of the annual report within approximately six months after the year end. Revision of the reporting documents was made in collaboration with the Canadian Tuberculosis Association and a new edition of the *Tuberculosis Statistics Handbook* was prepared for printing. In line with changing emphases in tuberculosis control, plans were made for improving the collection of case-finding information and for fuller analytical treatment of published data.

In addition to the publication of mental health statistics for 1956, the coding of all returns for 1957 was completed before the close of the fiscal year and preparations were made for re-design of reporting documents to be introduced next year. Special tabulations on mental illness among immigrants were made in response to a request by the Department of Citizenship and Immigration. The special analytical program in mental illness statistics was carried on by preparation of basic tabulations on historical trends in the duration of hospital stay, specific for age and diagnosis, as a basis for the calculation of stay-expectancy probabilities.

Judicial

During the year an intensive examination of the role of the Judicial Section was undertaken and a report, with recommendations, is now being prepared.

Studies were carried out in the areas of recidivism, classification of offences, and international comparability of crime statistics. The compilation of data on the census of Canadian penitentiaries on June 1, 1956 was completed. The main emphasis in the census was on age, sex, and marital status distributions of penitentiary inmates. A report of the studies from census data will be published together with the census of all other penal institutions in Canada when compilation of these data have been completed.

A study of recidivism, based on existing data, from 1950 to 1956 was undertaken at the request of the Department of Justice. Results show, by means of statistical tests of significant difference, that there has been no discernable trend or change in this area during the past seven years.

An evaluation of the various systems of classification of offences was completed, and the system used in the present reports of this Section was found to be inadequate in many ways. The effectiveness of a proposed classification has been tested on the criminal records of 2,000 cases. The criterion used in this study was the degree of homogeneity of the offences falling within the sub-groups of the system.

The results of a cross-cultural comparison of crime in Canada and in England and Wales showed that neither an increase nor a decrease in rates of persons convicted of indictable offences was evident during the period 1950 to 1955 in these countries. Difficulties were encountered in establishing comparisons, but it was found that data for persons convicted of indictable offences are roughly equivalent.

After one and one-half years of intensive work on planning, collecting, tabulating, compiling and analyzing data for the Royal Commission on Criminal Law Relating to Criminal Sexual Psychopaths, the project has reached its conclusion. The tables have been submitted to the Chairman of the Royal Commission, and will be incorporated into the report. A methodological supplement in the form of a survey-research report has been prepared in this Section. Extensive statistical analysis has been performed on the basic tables. This supplement to the main report will not be published until the report of the Royal Commission has been issued to the public.

The 1956 decision to ask police departments to report on a monthly rather than on an annual basis was implemented in January 1957 and the changeover was nearing completion at the end of the calendar year. Arising out of the experience of monthly reporting, an improved form was put into use in January 1958 and further improvements are being considered for the next year. Also arising out of the experience of monthly reporting, a standardized follow-up routine was adopted and other improvements are still to be made. Some improvements in the layout of the annual report have been agreed upon and will be reflected in the 1957 report. During the year, enlarged coverage was brought about by securing the co-operation of additional police departments in the submitting of reports and this program is being continued.

Compilation and tabulation of the data for the annual report of *Statistics of Criminal and Other Offences 1956* were completed. Parts I, II and III of this report are, for the first time, fully based on the newly revised Criminal Code of Canada. The data relating to clemency were extended and cross-classified by type of clemency, age group, place and type of release, offence, sentence, proportion of sentence served together with conditions of ticket of leave. New developments, begun with the coding of data for the 1957 report, will result in making available data on the number of appearances of accused persons before the court.

INDUSTRY AND MERCHANDISING DIVISION

The principal responsibilities of the Industry and Merchandising Division include: taking an annual census of industry covering all establishments engaged in mining, logging and manufacturing; and providing current data, monthly or quarterly, on shipments, inventories and new orders, and on principal commodities or groups of commodities; taking a decennial census of merchandising and services, and providing current data, monthly or quarterly, on retail and wholesale sales and inventories, and annually on selected service trades; conducting special studies in the industrial and merchandising fields in answer to special requests. The Division, which is organized in 10 Sections, publishes 230 annual, 66 monthly and 8 quarterly reports, as well as preparing a large number of special statements in answer to inquiries.

Two working manuals on the Division's operations were issued during the year. These were: *Guide to the Commodity Statistics of the Industry and Merchandising Division* (other than Census of Industry), and *Guide to Pub-*

lications of the Industry and Merchandising Division which Delimit Subgroups of the Standard Industrial Classification. These manuals met with favourable response from business firms and librarians.

A further reference paper was published in the series on *Energy Sources in Canada*. It provides historical data, for the years 1926, 1933 and 1939, on the supply and usage of coal, gas, oil and other energy commodities.

Greater use was made of the *Daily Bulletin* in releasing significant data in advance of regular publications, and more special statements were issued on important commodities or groups of commodities. Also there was substantial improvement in the timeliness of regular reports.

A review of all surveys and all questionnaires has been started, the object being to re-assess needs, to simplify requirements where possible, and to consider priorities.

As of October 1, 1957 a reorganization of the work in Merchandising and Services took place and the Sections formerly known as the Merchandising and Services Section and the Decennial Census of Distribution Section became the Retail Trade Section and the Wholesale Trade and Services Section respectively. The principal changes in the distribution of responsibility were concerned with a division of work between the Sections according to subject matter. The purpose of this reorganization was to facilitate the development of statistics in the various fields. It was felt the previous division of work on the basis of whether the survey was a decennial bench-mark survey or a current survey hampered this development.

A change in procedure for producing the geographical breakdown of the principal statistics for manufacturing permitted the publication, for the first time, of a complete industry detail for each county or census division. The change also resulted in a gain of three months in timeliness of publication.

Animal Products

It was decided to include pasteurizing plants, about 1,000 in number, in the annual Census of Industry. A survey of these establishments is now under way for the calendar year 1957, and the results will be published in the regular annual report on the *Dairy Factory Industry*. Formerly, only plants engaged in pasteurizing and bottling were classified to retail trade.

Coverage of statistics on poultry processing was extended to include all concerns licensed by the Department of Agriculture. Previously the annual statistics included only the processing done by meat-packing and food-canning plants.

Fisheries

The new statistical unit at Halifax has now completed a full year's operations. It is considered that the change to the use of purchase slips in the compilation of fish landings has worked out satisfactorily for all concerned.

Starting with the September 1957 issue, the *Monthly Review of Canadian Fisheries Statistics* was expanded, the tables were recast and the report was made completely bilingual.

Tables for the monthly report on cold storage holdings of fish were also recast, beginning with January 1958. Data on fish frozen are now given by province or area. Previously only the stocks figures were shown on this basis, the freezings being published only for Canada as a whole. As the amounts frozen are very close to production the breakdown by province is of considerable interest.

The annual report on *Fisheries Statistics of Canada* was expanded to include additional details for Newfoundland, bringing data for this province in line with those published for the other provinces.

The 1956 issue of the *Fish Processing Industry* segregated for the first time the statistics of fish processing proper from those for fish packing and handling.

Foods and Beverages

For the past two years plans have been underway to develop monthly reporting on meat and meat preparations. Numerous difficulties in reporting were encountered because of interplant shipments at various levels of processing. These problems have now been cleared up and it is expected that publication of data on net shipments by packing plants, classified by main products, will begin shortly.

Beginning with 1958, the new monthly survey on packs and inventories of principal fruits and vegetables has been broken into three separate surveys—a monthly on production, a monthly on stocks and an annual on raw materials used.

Forestry

During the year revised estimates of operations in the woods for the period 1940 to 1955 were completed and the detailed report containing the new figures is being printed.

The changeover from value of production to value of factory shipments was put into effect for the pulp and paper industry and for the veneers and plywoods industry. The changes delayed publication of the reports on these industries.

As of January 1958 the questionnaires for sawmills (east of the Rockies) and for veneers and plywoods were simplified and a monthly publication on *Pulpwood Production, Consumption and Inventories* was started. The Forestry Section participates actively in the work of the newly created Interdepartmental Advisory Committee on Forestry Statistics.

Inventories

Coverage for the monthly sample survey of *Manufacturers' Inventories, Shipments and Orders* was increased by the addition of about 725 plants to permit estimates of shipments on a provincial basis.

A start was made on a new annual survey designed to provide a bench mark for monthly estimates of sales and inventories of manufacturers' trading outlets, an important sector of wholesale trade. Numerous definitional and conceptual problems have held up this work considerably.

Metal and Chemical Products

Annual compilations were completed about three months earlier than for the previous year. Also, greater gains in timeliness for data on important commodities and groups of commodities were achieved by giving special attention to selected items and preparing interim statements for release as soon as totals were available. A revised procedure for compiling monthly figures on refined petroleum products, whereby import data run a month behind the other information, has made it possible to gain about five weeks in the time required to compile and publish the monthly report.

Monthly surveys have been started on the following commodities: welding electrodes; floor polishers; vacuum cleaners; specified household electrical appliances; air-conditioning and refrigeration equipment; industrial chemicals; primary plastics; compressed gases; explosives and ammunition; and fertilizers.

A semi-annual survey on the number of retail gasoline outlets was started in June 1957.

Mineral Statistics

All compilations for 1956 were completed, and all reports forwarded for printing early in December 1957; this represents a substantial gain in timeliness over previous years.

A *Chronological Record of Canadian Mining Events Since 1604 and Mineral Statistics, 1886-1956* was published. This was one of the official documents distributed to delegates to the Commonwealth Mining and Metallurgical Congress.

Retail Trade

New projects started during the year include: an annual survey on shopping centres in Canada; a monthly survey on sales of the principal farm implements; a study of the business done by automatic vending machine operators; an annual survey of retail trade, using an expanded sample designed particularly to provide separate estimates for each of the Maritime Provinces. It will also provide more reliable bench marks for the monthly surveys on retail sales, inventories and retail credit.

Textiles and Miscellaneous Products

The most significant feature of the period under review was the volume of special work arising out of the Tariff Board's review of all major tariff items relating to textiles. This Section has worked in close co-operation with the Board and with industry representatives. Compilation of regular Census of Industry data was expedited, special surveys were undertaken as required, and many special tabulations were provided.

A survey on shipments of T-shirts, polo shirts, jerseys and similar garments by Canadian manufacturers was undertaken for 1956 at the request of the industry.

Wholesale Trade and Services

An improved program for wholesale statistics is being developed. Using data supplied by the Unemployment Insurance Commission, a study of 'births' and 'deaths' of stores is now in progress which will make it possible to publish revised data on sales for the years from 1951 to date. It is hoped also to publish estimates on inventories for these years.

An attempt is being made to build up a complete list of wholesale establishments in Canada. This will make it possible to carry out periodic benchmark surveys in this field as well as to improve the current sample surveys.

To extend the current work in wholesale trade beyond the category of wholesalers proper, a survey of agents and brokers is under way for 1957. Concerns in the latter category account for nearly one-fifth of the wholesale trade.

Investigations were continued on certain aspects of the 1951 census of retail trade, particularly on the reliability of the estimates on commodity sales and on the adequacy of classification procedures.

Work was continued on the experimental survey on distribution of manufacturers' shipments in 1956. The results of this survey will supply essential information on the structure of merchandising in Canada. It appears, however, that manufacturers have a great deal of difficulty in supplying even a minimum of information on distribution of their shipments among various kinds of buyers.

A special survey entitled Funeral Directors, 1956 was completed.

INFORMATION SERVICES DIVISION

The functions of the Division include the planning, editing and production of the *Canada Year Book*, the official annual compendium of information on the institutions and the economic and social development of Canada; the official handbook *Canada*, the concise illustrated annual portrayal of present conditions and recent progress of the nation; the *DBS Daily Bulletin* and *Weekly Bulletin* which carry annotations of all publications of the Bureau on

date of release and constitute the principal media of communication with the Press respecting the D.B.S. statistical releases; and the catalogue of *Current Publications* for the promotion of general distribution. In addition to the storing, handling, and public distribution of a wide variety of statistical publications, the Division provides the focal centre for general inquiries, the channel for the dissemination of Dominion Bureau of Statistics information and attendant public relations, and the library facilities for statistical research and study.

Canada Year Book

The Section's principal role is the production of the *Canada Year Book* and the official handbook *Canada*. By the close of the fiscal year, the complete text of the 1957-58 edition of the Year Book was assembled, edited, set in galley proofs and, following proof-reading and final editing, about one-half of the page signatures of the volume were printed.

In order to expedite the translation of the *Canada Year Book* material and thereby reduce the time lag between release of the English and the French-language editions, the Edited English copy is now being photostated before going to the Printing Bureau so that the Translation Section may commence translation of the text into French without awaiting return of the English galley proofs.

The official handbook *Canada 1957* was released on June 14, 1957, with a larger press run than ever before — 130,000 English and 30,400 French — in an endeavour to present an up-to-date survey of the industrial, social and cultural life of Canada to an increasingly large audience. Through the period from October 1957 to March 1958, *Canada 1958* was in an advanced stage of production, with publication forecast for the month of May.

The Economic Mapping Unit prepared 68 charts and 6 maps for the *Canada Year Book*, including a distribution of population map based on 1956 Census compilations.

Press and Publicity

This Section is concerned mainly with the supply and distribution of Bureau information and publications to the public and to government officials. Its organization for this purpose consists of three closely co-ordinated units: Bulletins and Publicity; General Inquiries, Publications Information and Revenue; and Distribution and Storage. In the aggregate, the work of these Units during 1957-58 showed continued evidence of expansion.

The Bulletins and Publicity Unit examined and listed 1,770 printed reports compared with 1,730 for the previous year, and dealt with over 250 special releases and a new weekly series of advance industry and production notes in the preparation of the *Daily Bulletin* and the *Weekly Bulletin*. These bulletins contain news summaries of each day's and each week's issues of Bureau reports and other information not available otherwise in printed form in order to provide full coverage of current information issued by the Bureau. During the year the *Daily Bulletin* averaged four pages per issue and the

Weekly Bulletin 18 pages. The Unit revised the list of *Current Publications* for 1958 and prepared displays to publicize publications at several large and small conferences.

Letters and orders received by the General Inquiries, Publications Information and Revenue Unit dropped off in total number to 28,198 from 34,076 in 1956-57, but the number containing money was practically unchanged at 12,280 and the net revenue from subscriptions and individual sales of publications rose by 13 per cent from \$54,210 to \$61,218. The decrease in letters and inquiries may be attributed to the fact that there was no issue of the *Canada Year Book* within the fiscal year and to a drop in referrals for over-the-counter sales from the Queen's Printer.

Copies of publications mailed by the Distribution and Storage Unit to addressees on the regular mailing lists rose from 1,602,000 to 1,897,000 while the number dispatched from stocks to meet special orders decreased from 103,000 during the previous year to 80,500. Throughout most of the year the Unit regularly supplied quantities of Bureau publications to the Queen's Printer for direct sale such sales probably accounted, as indicated above, for this decrease as well.

New and revised statistical material relative to Canada was supplied to more than twenty national and international annuals, almanacs and year books, and a great variety of statistical material was specially prepared to meet numerous requests from publishers of diaries, memoranda and special booklets.

The Library

The library collection includes books, pamphlets, periodicals, government documents and historical reports covering a wide variety of subjects for use within and without D.B.S. While this collection is increased by new acquisitions, older works no longer required are pruned out and forwarded to other libraries or deposited with the National Library.

Circulation from the main charging desk during the year showed a drop from 9,144 to 8,166 items, attributed solely to a decline in the number of annual reports charged from this desk; an abnormal increase of circulation in the same item had, however, occurred the previous year. On the other hand, there was an increase over the previous fiscal year in the number of books and pamphlets loaned, but a light decrease in the routing statistics for periodicals. These circulation statistics are not, however, an adequate measure of the use of the library, as the record of circulation covers only material taken from the library for office use, and not the items consulted within the library.

The demand on the time of the reference staff has increased to the point where little time is available for necessary reorganization and project work. The study rooms continue to be in very heavy demand by research workers. Considerable use is being made of the library by other agencies of the government which do not possess library facilities. Items loaned to other government libraries have increased, the Tariff Board being the latest agency to commence making considerable use of D.B.S. library resources.

Project work has been concentrated on a Checklist of D.B.S. Publication—a complete historical record of all titles ever published by this organization. The basic card record together with title index have been compiled and it is now possible to answer queries about the history of any Dominion Bureau of Statistics report. Titles are now being checked with the Divisions for completeness and when all Divisions have completed checking, it is proposed that the record of titles be published as an Historical Catalogue of D.B.S. Publications.

The number of items acquired by the library increased during the year. With the resumption of publishing of statistical information by Roumania and Bulgaria, the library is now receiving statistical publications on exchange from all major foreign countries except the Chinese People's Republic. Major acquisitions included the third volume of the five-volume set of the *Times Atlas of the World* and the first two volumes of the new *Encyclopedia Canadiana*.

The number of titles catalogued exceeded the number received during the year, thereby resulting in the clearing up of some of the backlog which accumulated some years ago.

Expenditures on publications rose from \$5,500 to \$6,200 as a result of increased prices of directories and periodicals.

INTERNATIONAL TRADE DIVISION

The field of statistical information with which the International Trade Division is concerned covers the many kinds of commercial and financial transactions which occur between Canada and other countries. The more specific areas dealt with include exports and imports in Canada's international commodity trade, the wide range of exchange of services and capital movements which are included in balance of payments statements, international investments, and other components of Canada's international financial position, and international travel movements and expenditures. The Division is responsible both for the compilation of basic series and the preparation of studies and analytical comments and aids to analysis assisting in the interpretation of data. The program of development is directed toward extension of these functions by improvements in basic presentation of statistics and the publication of more frequent series when information is in demand.

The nature of activities in the Division ranges from large production operations to highly specialized analysis and research into international transactions. Some of these responsibilities require individual research and constant initiative in devising new sources of information on Canada's international transactions. Other operations involve the organization of large staffs in routine procedures in handling the flow of documents. The processing of a growing volume of statistical data each month continues to be one of the leading functions of the Division.

External Trade

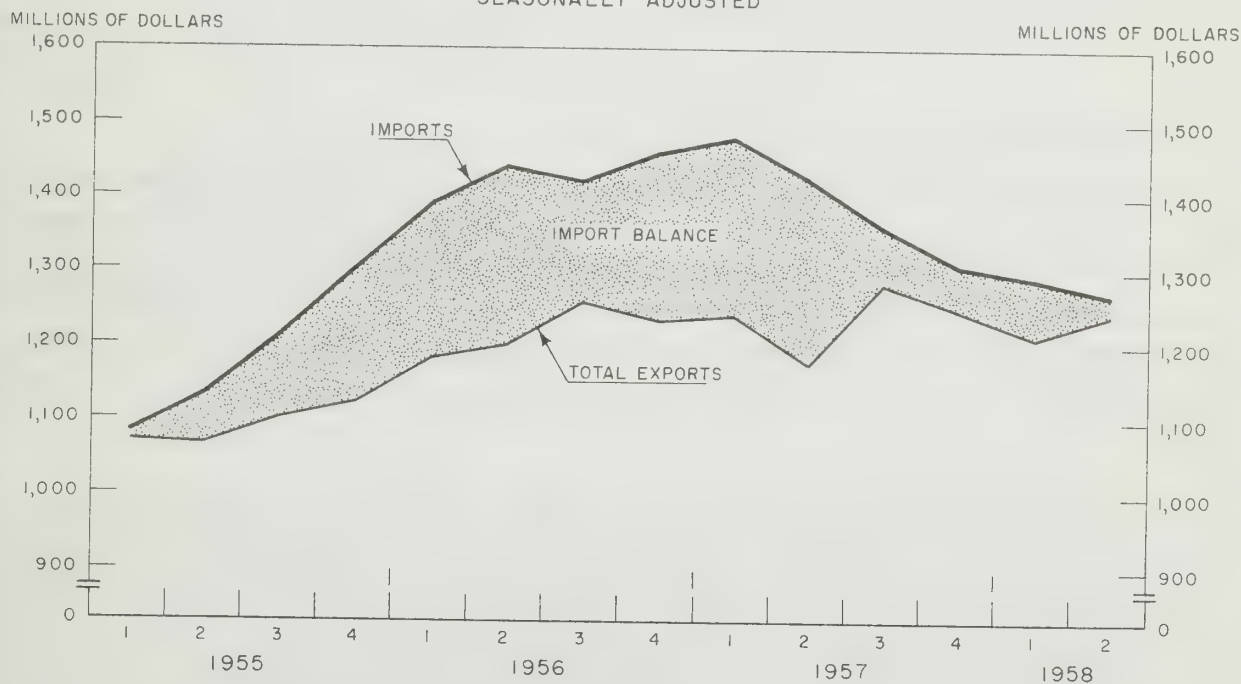
Again, as in 1956-57, the greatest difficulties of the External Trade Section were in the recruiting and training of clerical staff. Operations during the year were also affected by the lower average level of experience of those holding senior positions in the Section. Overtime work by experienced clerks was again necessary to handle the near-record work load of the Section, but toward the end of the year the returns, from the overtime work, were clearly diminishing. Thirty months of almost continuous overtime work had begun to impair the amount and the quality of work performed in the Import Unit. Regular overtime work was therefore suspended in February 1958 and it is hoped that further overtime work can be avoided until the autumn without too seriously affecting the timeliness of trade statistics.

During the year, a review was made of the Section's policies regarding the provision of special statistical statements on a service-charge basis. As a result the prices of these statements were raised to cover present direct service costs and certain classes of service which could not be made generally available were discontinued. The time saved in this way was used to permit a limited resumption of occasional surveys to answer requests for information not contained in the regular publications of the Section.

The first draft of a new export classification based on the Standard Commodity Classification was completed during the year, and work was advanced on the revision of the export and import price indexes on the new basis. The study of the significance of small value shipments in export statistics was largely completed, and a similar study undertaken for imports, but no further change in existing coding practices seems desirable at present.

EXPORTS AND IMPORTS BY QUARTERS, 1955-1958

SEASONALLY ADJUSTED



Balance of Payments and International Investments

The expansion in the volume of inflows of capital to Canada in recent years has fully occupied the staff of the Balance of Payments Section in the task of maintaining records and publishing the regular quarterly and annual reports on the balance of payments and international indebtedness. The content of annual reports has been extended in scope by presenting annually some of the special analyses on foreign investment in Canada which first appeared in the special report *Canada's International Investment Position 1926-1954*, or those which were prepared for the Royal Commission on Canada's Economic Prospects.

Indicative of the effect of increases in capital inflows on operations is the growth in the number of Canadian concerns controlled abroad. These firms are now double the number existing at the beginning of the post-war period, having increased by about one-half in the last five years. The expansion in capital inflows has increased the range and number of capital transactions that have to be initially investigated and carried through into the statements, and has also enlarged the number of business concerns controlled abroad and carried into subsequent annual records of international investments in Canadian concerns. There has consequently been a rapid expansion in the work load of both the professional and clerical resources of the Section. The effects of this expansion grew progressively in the current year and the flow of statistics has been maintained up to now only by holding special detailed studies and new research in this field to a minimum and by eliminating some operations. At the same time public interest in the extent and location of foreign capital in Canada continues to grow.

Close liaison continued with other official organizations interested in balance of payments information and special presentations of data were drawn up for various international organizations.

Travel Statistics

Improvements continued to be made in the quality of information collected on the travel of Canadians overseas. This was through the extension of sample returns from persons who have travelled abroad and the redesign of schedules used in covering overseas travel by way of the United States. From the resulting returns more information has become available on countries visited and on international transportation expenditures as well as other expenditures.

The special survey of a selected group of United States travellers to Canada was extended throughout the year to take account of seasonal variations in the pattern of travel covered by this source. This information which supplements data collected from regular sources is to be used to assist Canadian Economic Research Associates in studies being conducted on the economics of the Canadian tourist industry for a joint Federal-Provincial committee interested in extending information on this subject.

LABOUR AND PRICES DIVISION

The Labour and Prices Division is composed of three main Sections and a small central staff. The Employment Section collects and publishes statistics of employment, aggregate payrolls, hours of work and per capita earnings. The Unemployment Insurance Section serves the Unemployment Insurance Commission's administrative needs for operational statistics, and also publishes data of general interest which emanate from the Commission's operations. The Prices Section issues a wide range of price statistics covering the fields of wholesale and retail prices, as well as security prices. It has been called upon, also, to assume rapidly increasing responsibilities for the production of statistics to facilitate the adjustment of living allowances for government personnel posted abroad, and for officers posted in less accessible areas of Canada. The central staff is primarily concerned with the preparation of labour income estimates and with urban family living expenditure surveys.

Employment

There was further improvement in timeliness of publication of the Section's monthly reports during 1957-58, the date of release of *Employment and Payrolls* advancing in the latter months of the period by about two weeks as compared with a year earlier. Because priority in tabulation has been given to the employment statistics, the gain in release of *Man-Hours and Hourly Earnings* has been somewhat less, approximating one week. Co-operation from the Mechanical Tabulation Division contributed materially to this improvement.

During the autumn a questionnaire was sent to subscribers to the report *Employment and Payrolls* asking for information regarding the uses to which the series in this report are put, and requesting suggestions for improvement. The inquiry, which met with a gratifying response, revealed a widespread public desire for more detailed industry and area material than is now published.

Late in 1957 it was decided, in response to many requests, to publish on a monthly basis rather than quarterly, statistics of average hours and earnings in manufacturing in a group of 23 medium-sized centres, in addition to the data for the 13 larger metropolitan areas which have been published each month for many years. To avoid further delay in preparation of the report, however, the figures for the new list of communities are given for the month preceding the reference data of most of the information contained in current publications.

In compliance with a request from the Atlantic Provinces Economic Council, arrangements were made in 1957 to prepare indexes of employment and payrolls and average weekly wages and salary data for Census areas in the Atlantic Provinces. Tabulation of monthly statistics for the areas commenced with the January 1, 1958 material. This arrangement is in line with established policy to supply provinces with available area detail on employment and earnings in order to prevent duplication of effort.

Unemployment Insurance

Considerable advancement was achieved in the direction of qualitative improvement, as senior officers of the Section visited the five regional offices of the Unemployment Insurance Commission and the larger local offices located at those centres. Section officers were given every opportunity to see first-hand the administrative operations from which the statistics emanated. At the same time, UIC personnel engaged in collection of statistical data expressed satisfaction at meeting D.B.S. staff and receiving answers to questions on the background of statistics and the use made of them. The visits were timely, in that one major project was in process, viz., the annual renewal of contribution records for the year ended March 31, 1957. The collection of data covering the insured population (on a 10 per cent sample basis) is an integral part of this procedure. The operation of sampling the 1956 records for the actuarial study on insured employment and earnings was due to begin at mid-summer, so considerable time was spent with personnel assigned to complete the sample questionnaires.

In addition to the regular monthly, quarterly, semi-annual and annual publications issued by the Section a reference paper on *Employment Under the Unemployment Insurance Act* was released. The special report covering benefit statistics was prepared and presented at the July meeting of the Unemployment Insurance Advisory Committee.

The Section was called upon to make a number of special studies as the Unemployment Insurance Commission was confronted with particular problems during the year. These sometimes involved the study of a small sample of basic documents already available in Section files, but in certain cases the co-operation of local offices was required, as in the case of a special study on contributions and benefit for claimants in such seasonal industries as logging, sawmills, construction, and transportation by water.

As the year came to a close Section officers were engaged in a study of proposed mechanization of benefit payments, with special emphasis on its impact on statistics.

Prices

During the year under review the resources of the Prices Section were divided between production and developmental work. The Section published on a weekly and monthly basis its regular complement of price indexes at retail and wholesale levels covering consumer, industry and farm commodities, as well as a series of international price comparisons. This production load occupied most of the resources available, but in addition the staff was involved with a number of developmental projects.

Assistance was given in the design of schedules, preparation of enumeration manuals, and a field test of schedules for a proposed survey of farm income and expenditure.

Price collection has been expanded and an improved sample design introduced in areas of farm machinery, fertilizer, and industrial machinery and equipment.

A study of feasibility and methods with regard to the development of a price index of highway construction was undertaken. In this connection, a paper entitled *A Proposed Highway Price Index* was prepared for presentation at the annual meeting of the Canadian Good Roads Association.

Subsequent to the collection of a much larger number of manufacturers' prices, preliminary price indexes relating to the output of various industries were calculated. Some analysis of these indexes was undertaken preparatory to their publication. In the area of wholesale prices, the release date of the General Wholesale Price Index was advanced, and the index is now available on the last day of the month to which it applies.

New weighting patterns reflecting the change in expenditures of Canadian government personnel stationed abroad were introduced into indexes measuring price conditions being encountered by such personnel.

In co-operation with the Special Surveys Division and the Central Mortgage and Housing Corporation a new rent schedule was introduced. This schedule was designed to obtain rent information for dwelling units of differing characteristics.

A program of weekly price collection of retail prices of food was undertaken in certain cities in co-operation with the Federal and Ontario Departments of Agriculture. Spatial price comparisons were made for a number of areas in Canada including northern or isolated locations, and St. John's, Newfoundland.

Experimental work was undertaken in connection with the mechanical tabulation of retail food prices. Also in the field of retail prices, developmental work is in progress in connection with a swatch book, shuttle schedules, and a field training manual.

The monthly publication of average retail food prices for urban Canada was commenced in the October 1957 issue of *Prices and Price Indexes*. Descriptive material covering store samples, specifications, and calculation techniques was also included. An analysis of consumer price movements in 1957 was published in the January 1958 edition of the same publication.

Central Staff

Considerable time was devoted to completing an historical revision of labour income estimates and to making changes which will permit regular publication of more complete industry detail and area sub-totals. Publication of seasonally adjusted monthly estimates was begun.

A reference paper on *City Family Expenditure 1955* containing several analytical appendices in addition to a comprehensive presentation of 1955 survey data was issued. Substantial progress was made in processing the 1957 urban family living expenditure data collected by the Special Surveys Division. A steady flow of food expenditure and family living conditions schedules resulted from monthly surveys of these data. Mechanical tabulation of family living conditions data was completed.

MECHANICAL TABULATION DIVISION

The Mechanical Tabulation Division is a service division which processes data supplied by the subject divisions through a variety of mechanical equipment, in order to supply statistical tabulations as required.

Of the total staff some 45 per cent operate key punching and key verifying machines. By means of a key board, operators of key punching machines record data from source documents on punch cards in the form of holes. Using a similar key board, operators of key verifying machines are able to independently verify the accuracy of data recorded on punch cards in this form. Approximately 40 per cent of the staff operate a variety of other punched card equipment such as sorters, which sort or group like-cards together, and tabulators, which produce the required totals for these groups of cards in printed form.

The remainder are employed on comptometers and desk calculators producing aggregates directly from data recorded on pre-sorted groups of source documents. Most of the source documents so processed are in the form of peg-bar schedules which use an overlapping principle and are particularly adaptable to speedy adding operations.

Most of the work of the Division during the year involved monthly, quarterly and annual tabulation programs which are repetitive and for the most part routine. However, a large number of requests (190) for special tabulations were received and handled during the course of the year. Tabulating services for the Immigration Branch and the National Film Board were continued as in past years. An extensive program of tabulations was undertaken for the Department of Insurance in connection with its periodic evaluation of the Public Service Superannuation Account. Considerable tabulation work was carried out for the Department of Labour particularly in connection with a continuing survey of members of scientific and technical professions. Some work was also done for the Post Office Department.

Increasing emphasis was placed upon planning of new procedures and improvements in established procedures. As a result the annual *Shipping Report* and the annual *Geographical Distribution of Manufacturing Industries* were produced by photographing machine tabulations directly and printing by photo offset methods. This resulted in a considerable saving in clerical, vari-typing and proof-reading time.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

The work of the Division is divided among three Sections: Public Finance; Government Employment and Payrolls; and Transportation and Public Utilities.

The Public Finance Section is responsible for statistics on federal, provincial and municipal government finance and for their consolidation for the purpose of combined government finance. In addition, the Section is responsible for the collection and publication of data concerning selected

taxes and rates for all governments in Canada, the control and sale of alcoholic beverages, and special analyses used in the compilation of national income and public investment statistics.

The Government Employment and Payrolls Section is responsible for statistics on employment and payrolls for all three levels of government. Federal government payroll data is compiled to serve two basic requirements: first, that of the various government departments or branches of the service that are concerned with personnel control and administration, such as the Civil Service Commission and the Treasury Board, as well as the requirements of other Divisions of the Dominion Bureau of Statistics; and secondly, to meet the requirements of the general public.

The Transportation and Public Utilities Section covers a wide range of activities comprehending statistics for the various transport agencies and public utilities. Transport fields covered include steam and electric railways, express companies, motor carriers, international bridges, tunnel and ferry companies, canals, coastwise shipping, international seaborne shipping and water transportation. Public utilities presently covered are telephone, telegraph and cable systems, urban transit systems, oil pipe lines and central electric stations.

Public Finance

The annual report, *Financial Statistics of Municipal Governments 1956 and 1957*, contained for the first time estimates of revenue, expenditure, assessed valuations and tax collections of municipal governments in Canada. The considerable time lag between the end of the fiscal year under review and the release of financial statistics of municipal governments has long been of concern. Dominion-Provincial conferences, realizing the need for earlier indication of trends in these statistics, approved a proposal for a survey which would permit estimation from returns obtained from a sample of municipal government operating statements and budgets.

The statistical procedure calls for a stratified sampling of certain financial information; the edited and compiled returns forming the bases for estimates. Theoretical tests indicate that this stratified sampling will permit quite accurate estimates. The success of this venture will make municipal finance statistics available in three stages: 1) Estimates—based on a sample of municipal budgets; 2) Preliminary figures—based on sample of actual figures; and 3) Actual figures—based on the published financial reports of provincial departments of municipal affairs. It should be emphasized that the above procedure was made possible by developments in uniform municipal accounting and reporting and will be facilitated in future by additional improvements. The assistance and co-operation of provincial and municipal government officials played a very important part in the production of these estimates.

Previously, statistics dealing with provincial government debt have not been published until all provincial public accounts were released. Arrangements have now been made with provincial governments for the early release

(about two months following the fiscal year under review) of both the funded and indirect debt portions of this report – a gain of about 12 months in timeliness. The remainder of the debt information will still be obtained from public accounts and published at approximately the same time as under existing arrangements.

The Provincial Finance Continuing Committee appointed at the Sixth Dominion-Provincial Conference on Provincial Finance Statistics, held its third meeting in May 1957, primarily for the purpose of reviewing progress made by the provinces toward implementation of conference recommendations on uniformity in public accounts.

The Continuing Committee appointed at the Sixth Dominion-Provincial Conference on Municipal Statistics held two meetings during the year. This committee gave extensive consideration to changes in the reporting statements recommended for use by municipalities, particularly of balance sheet and debt reporting, and considered means of reporting capital expenditure. A considerable number of changes in the classification of items and in definition were proposed.

Government Employment and Payrolls

This Section released for the first time a quarterly statement covering the employment statistics of nine provincial governments. At present, distribution is restricted to provincial and federal authorities but it is hoped that arrangements may be made in the near future to issue a general report.

The general salary revision which occurred on May 1, 1957 caused some delay in the production of federal government employment statistics. This involved changing the salaries of virtually every position in the service with a consequent need to alter the basic position record cards. Substantial advances, however, were achieved in terms of the accuracy of basic records which were completely reviewed during the processing of the 1957-58 establishment review and the general salary revision.

A number of special requests were met during the year. These took the form of special tabulations involving two or more of the following groupings: a count of the number of employees by classification; by salary step-rate; the number of male and female employees and their earnings in each grade; by classification; and by geographic location.

At the present time there is insufficient comparability between the various classifications used by this Section, by the Civil Service Commission, and by other government offices in connection with employment in the federal government service. Negotiations have been begun with the Civil Service Commission to establish an inter-departmental committee to develop uniform classifications for use throughout the Service.

Transportation and Public Utilities

Communications, Water and Air Transport Unit – The revision of monthly and annual *Central Electric Stations* reports is now complete and has resulted in a new series entitled *Electric Power Statistics*, which encom-

passes power produced by industry for own use as well as that produced by utilities for general distribution. As a result, electric power statistics are presented in terms of total production rather than only that portion marketed. An historical summary of electric power net generation was prepared on the new basis and published as an addendum to the June 1957 report. The annual index of electricity bills for domestic service was converted from a 1935-39 to a 1949 base. The revised index appeared in the 1956 *Electricity Bills* report.

The new report in the electric power series inaugurated in 1957 is entitled *Electric and Gas Meter Registrations*. Formerly compiled and distributed by the Standards Division of the Department of Trade and Commerce, this report contains statistics on electric and gas meters in use in Canada, including tabulations by county and census division.

Progress has been made in connection with a quinquennial census of electric power generating equipment. Thermal and hydraulic reporting schedules designed in co-operation with the Canadian Electrical Association and officials of other government departments, are now in their final draft. The census is expected to provide an up-to-date plant inventory of installed capacity including capacity of industrial firms which produce power for their own use.

Requirements of the Dominion Coal Board and Department of Mines and Technical Surveys for data on fuel consumption related to thermal generation is being met through a special survey.

A new uniform classification of accounts has been approved by the Board of Transport Commissioners for use by oil pipe line companies under the Board's jurisdiction commencing January 1, 1958. The new classification is expected to result in a joint DBS - Board of Transport Commissioners reporting form and an increase in the amount of data collected and published.

The results of a special pilot survey of the radio and television broadcasting industry were published under the title *Radio and Television Broadcasting Statistics 1956*. This survey was confined largely to the collection of financial data. Both the Canadian Broadcasting Corporation and the Canadian Association of Radio and Television Broadcasters, representing privately owned stations, have written expressing their approval of the report and stating that they would like to see the survey continue annually, preferably on an expanded basis.

Motor Transport Traffic Unit—Motor transport traffic surveys were carried out in all ten provinces for the first time during 1957 with the result that data are now available to compile the first annual report of *Motor Transport Traffic Statistics* for Canada.

Following a review of Ontario sample selection procedures it was found practical to eliminate a separate for-hire sample resulting in a reduction of sample selection costs in that province. In an effort to obtain a more representative cross-section of trucking operations, the feasibility of monthly surveys was studied and arrangements were subsequently made to carry them out.

The Chief of the Section visited Motor Vehicle Registrars and other provincial officials in Manitoba, Alberta and British Columbia to discuss various problems pertaining to motor transport traffic sample selections. In some cases arrangements were made to replace Regional Office supervisors of sample selection with provincial government appointees. In British Columbia agreement was reached on a new procedure for obtaining samples of more current motor vehicle registrations and for more accurate estimates of the motor carrier population, at reduced costs.

A paper entitled *Canadian Road Transport Traffic Survey – Special Problems Related to the Establishment of a Sample Survey on a Continuing Basis* was prepared for presentation at the 1957 meeting in Sweden of the International Statistical Institute.

Rail and Road Transport Unit – During the fiscal year the work of this Unit was rearranged in order to effect economies of supervision by combining the Rail and Road Transport Unit and the Industry Freight Traffic Unit.

A committee of the Automotive Transport Association of Ontario has been organized to revise the classification of accounts for motor carriers. Joint collection of motor carrier reports were proposed for the provinces of Manitoba and Alberta and this Bureau.

The quarterly publication *Motor Vehicle Traffic Accidents* was increased in size during 1957 to contain additional data available from eight provinces reporting on the basis of recommended practice adopted at the 1954 Dominion-Provincial Conference on Motor Vehicle Traffic Accidents.

A uniform road and street classification manual was adopted for reporting highway statistics in 1957 and it is expected that the results will provide comparable data for all provinces and municipalities on a uniform basis in keeping with recommendations of the Canadian Good Roads Association.

Industry Freight Traffic data for 1956 were summarized and forwarded to the Board of Transport Commissioners in September 1957. Four new commodity groups were added to the survey in 1957 bringing the total to sixteen, involving some 750 plants. Response during 1957 has been satisfactory, averaging 68 per cent.

RESEARCH AND DEVELOPMENT DIVISION

The work of the Research and Development Division is of a two-fold nature. On the one hand, the regular publications such as quarterly and annual *National Accounts* and the monthly *Canadian Statistical Review* absorb a substantial portion of available resources. On the other hand, there is a continuous process of research and developmental work, not only in connection with improvements in the above-mentioned publication, but also in connection with the general program of statistical integration. Members of the staff participate with other personnel at D.B.S. in such projects as

integration of labour statistics, changes in annual censuses of industry and merchandising, design and implementation of standard classification systems for industries and commodities, planning for specific surveys such as the new farm income and expenditure survey and development of the seasonal adjustment program.

Research work proceeds on a variety of fronts, sometimes culminating in the issuance of reference papers on the results of specific research projects, but mainly centred upon regular publications involving day-to-day work of the Division. Occasionally staff members are exchanged among projects, e.g., to expedite the completion of a large-scale project such as the historical revision of the National Accounts an inter-Section transfer of staff was implemented. Now that certain backlogs of developmental work have been overcome attention is being focussed on a long-range plan of research, within which the numerous separate research projects can be considered and implemented in a well-balanced framework.

National Income

In addition to the regular data on National Accounts the annual report *National Accounts, Income and Expenditure, 1950-1956* contained supplementary information for the years 1950 to 1956.

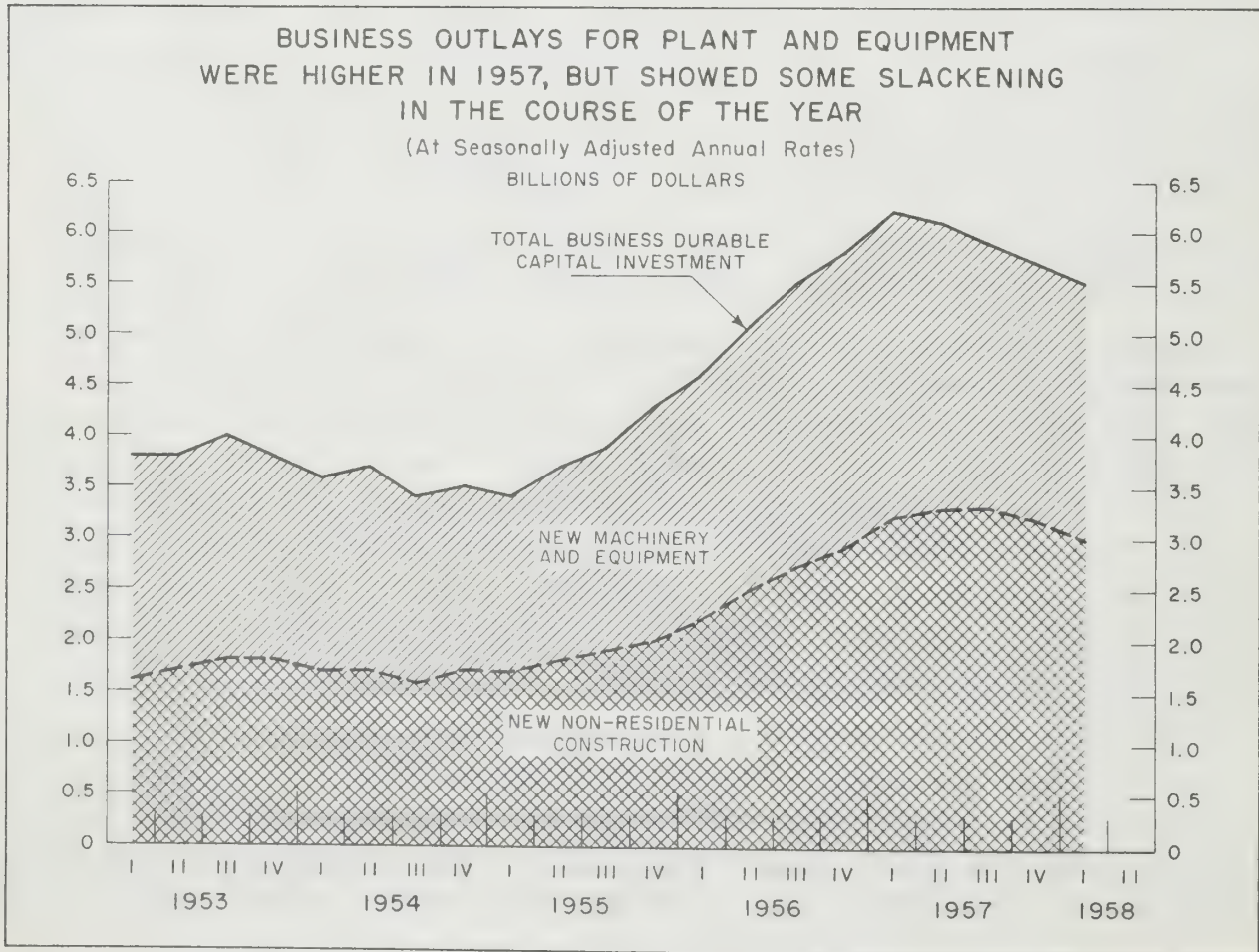
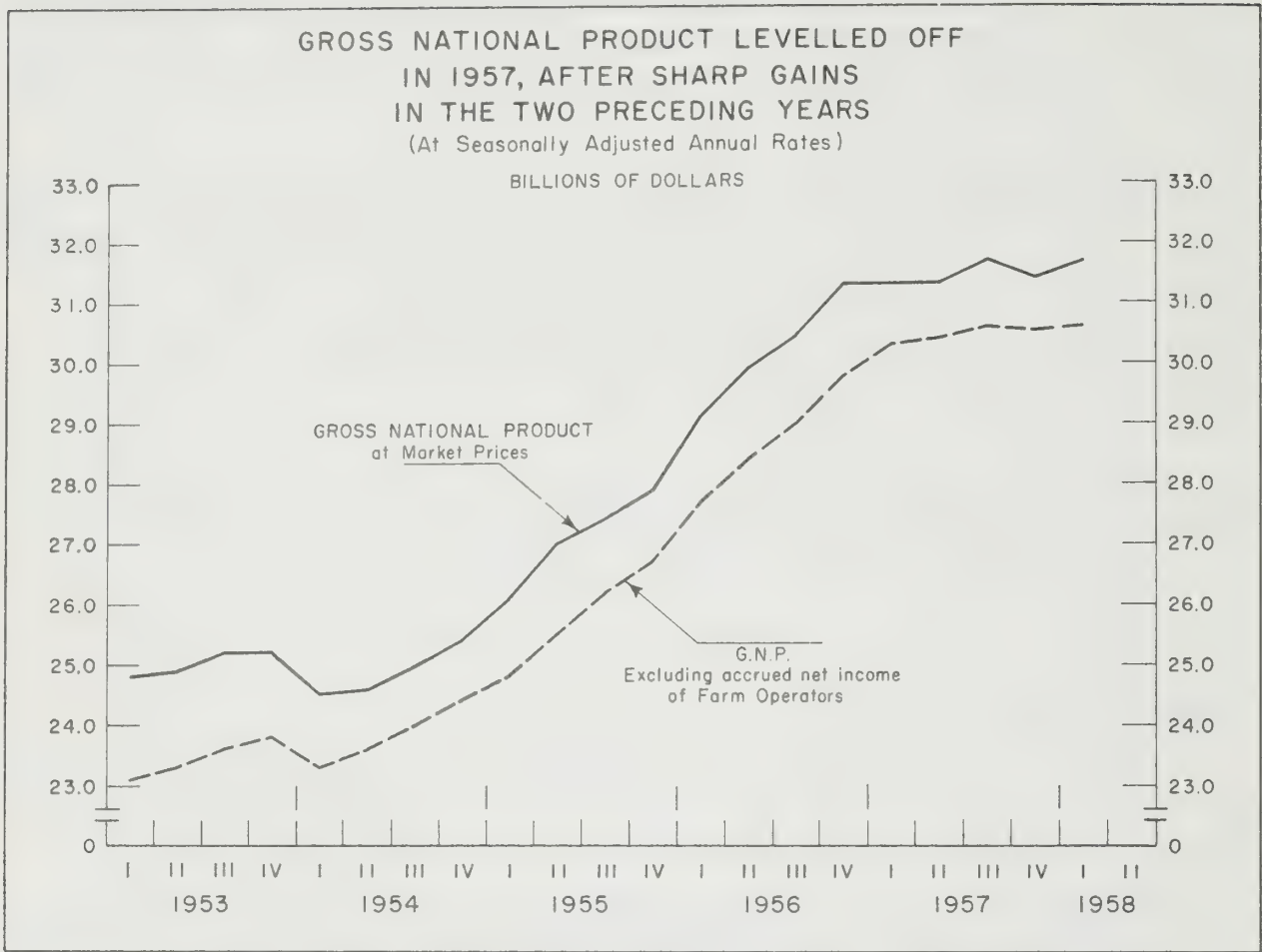
The final Certificates under the terms of the 1952 Dominion-Provincial Tax Rental Agreements were prepared and issued to the Minister of Finance and the provinces in April 1957. This set of certificates completed the obligations of D.B.S. under the five-year agreements covering the fiscal years 1952-53 to 1956-57.

Early in the fiscal year a reference paper entitled *Seasonally Adjusted Economic Indicators, 1947-1955* was published. In addition to seasonally adjusted economic indicators this reference paper contained a detailed description of problems and methods in seasonal adjustment.

Articles dealing with current economic conditions were published in the monthly issues of the *Canadian Statistical Review*.

During the year, work was completed on a major historical revision of the National Accounts from 1926-1956. This report consolidates the work in the field of National Accounts in Canada during the past five years and contains statistical revisions to the historical record as well as conceptual changes arising out of recent theoretical developments in the field of national accounting. The basic purpose of this document is to serve as a standard reference work on the Canadian National Accounts. In addition to many detailed tables, the report contains a description of sources and methods, and a broad discussion of the theoretical and conceptual framework of the Accounts.

As in other years, the National Accounts were re-cast in line with the requirements of the Organization for European Economic Cooperation and transmitted to that Organization. The Accounts were also prepared according to the Standard System of Accounts required by the Statistical Office of the



United Nations, and transmitted in that form to this agency. Toward the end of the year the National Income Section participated in the preparation of comments on certain proposed revisions to the United Nations Standard System of Accounts for the consideration of the United Nations Statistical Commission.

Members of the staff of the National Income Section assisted other Sections in the Division on a number of projects. In addition, work on projects outside the Division, such as a detailed alphabetical index of commodities in connection with the Standard Commodity Classification and planning for the sample survey of farm income and expenditure, was carried on.

Business Statistics

During the year the Section continued its program of developing and improving monthly, quarterly and annual real output estimates via the industry production approach. Development of improved labour input statistics for purposes of productivity analysis was continued as were various projects in connection with the general integration of labour statistics. At the same time, the regular publications program of the Section was carried out. The *1957 Supplement to the Canadian Statistical Review* was published late in the year.

Work on the revision of the Index of Industrial Production was nearing completion, and it is expected that the revised Index will be released early in the autumn.

Research and developmental work in connection with real output estimates for the other industries in the economy was suspended in order to expedite the revision of the industrial production sectors. This work will be resumed as soon as the new production index is completed. Meanwhile the experimental quarterly estimates (raw and seasonally adjusted) and a preliminary 1957 annual estimate of real output for all industrial sectors were prepared and distributed, together with analytical text, to interested government agencies. These estimates are provisional pending the application of further research and developmental work. They are presently used as analytical background for the National Accounts and as an overall check for the Gross National Product estimates. It is hoped that sufficient staff resources will be available in the near future to make the overall real output project operational, so that it can eventually be released to the general public.

Members of the staff participated actively in the study and discussion of the United Nations Statistical Office document *A System of Price and Quantity Indexes for National Accounts* which was to be reviewed at the 10th Session of the Statistical Commission in May 1958.

The productivity project was concerned mainly with the developmental work connected with improving labour input statistics. Editing and processing of the man-hours question in the 1956 census of manufacturers is continuing. To date, the editing of nearly 5,000 forms out of a total of about 20,000 has been either completed or partly completed.

The regular practice of relating the quarterly real output industry estimates to the most closely corresponding labour statistics was continued. This work is now on a routine basis and facilitates the analysis and discussions focussed on the quarterly National Accounts.

During the year work continued on various established projects in connection with the integration of labour statistics. Certain studies concerning the possibility of sampling small establishments in retail trade have been completed. Work on the annual benchmark estimates of employment has reached a point at which the industry estimates are being put together. A senior staff member has participated in the design of a circulating file of monthly labour statistics and in discussions concerning the economic characteristics questions for the 1961 Population Census.

Special Project

The data obtained from 4,700 non-farm families as a result of a sample survey undertaken in March 1956 were tabulated, analyzed and prepared for publication. The success of this survey is due to the remarkable co-operation of the members of the Canadian population who were selected for inclusion in the sample, a high response rate of 84 per cent being obtained. The statistics computed from these data on incomes, liquid assets, and consumer indebtedness, cross-classified by the age of the head of the family, employment status, and other family characteristics, will undoubtedly be extremely useful in providing structural information on the financial position of families. The results of the survey are published in the reference paper *Incomes, Liquid Assets, and Indebtedness of Non-Farm Families in Canada, 1955*.

The third of a continuing series of surveys designed to meet the narrower objective of producing income size distribution both for non-farm families and for individuals was taken in March and April 1958 in conjunction with the Labour Force Survey. This survey of approximately 7,500 families and unattached individuals will provide information for 1957 comparable to the information for the years 1951 and 1954 which was previously published. The larger sample will enable estimates to be made by regions as well as for Canada as a whole.

In co-operation with members of the research staffs of the Royal Commission on Canada's Economic Prospects and the Bank of Canada a joint project was carried out to expand the present framework of the *National Accounts, Income and Expenditure* to include financial transactions; the Bureau's share of this undertaking was completed during the year. A set of the resulting National Transactions Accounts for the years 1946 to 1954 will be published for the Royal Commission on Canada's Economic Prospects in an appendix to a study entitled *Financing of Economic Activity in Canada*. This latter study makes use of some of the statistics from the 1956 survey of liquid assets and consumer indebtedness referred to above.

SPECIAL SURVEYS DIVISION

The main functions of the Special Surveys Division are to obtain current information on population and on the housing characteristics of the Canadian people and, through its Regional Offices, to carry out field work for other Division of the Bureau.

The Division obtains, on a continuing basis by direct sample survey, data on labour force characteristics, expenditure patterns and other population characteristics. While estimates for small areas cannot be obtained from such surveys, the sampling method allows current statistics to be produced with a much greater degree of timeliness than would be possible with a complete count or census and at a cost which makes repetitive surveys economical. The field work requirements of the different Divisions of the Bureau are co-ordinated by the Special Surveys Division and referred to the Regional Offices located in eight centres from coast to coast as an integrated program.

During the year the Division continued to conduct investigations to improve the quality of the statistical material in both the field of sampling and statistical methods and field of enumerator-respondent interaction. The sample design forming the basis for most of the survey work of the division remained under constant review and the controlled program concerning non-sampling error was actively pursued. Re-enumeration was conducted on a regular basis and has provided useful material for analytical purposes.

The 1957 series of monthly surveys on family expenditures was carried on through December 1957. In January 1958 a summary survey covering the whole of the year 1957 was conducted on a somewhat larger sample. This is a project which is carried on every second year, and the Labour and Prices Division is processing and analyzing the results during 1958.

Throughout the year, data on new residential construction were collected on a monthly basis. The field work in rural areas and small urban centres was carried out by the Regional Offices and in the larger urban areas by local representatives of the Central Mortgage and Housing Corporation. The survey results were compiled in the Special Surveys Division and released in a series of monthly reports.

In May, the annual survey of household facilities and equipment was conducted, and in September and February special inquiries were made concerning the labour force characteristics of post-war immigrants.

The regional Offices supervised the selection of the quarterly samples in each province and for local follow-up of non-response for the survey of Motor Transport conducted by the Public Finance and Transportation Division.

Through the Regional Offices, the Division continued to collect monthly, quarterly and annual reports on behalf of other Divisions of the Bureau, from business establishments which had failed to mail them to D.B.S. within a reasonable time. Almost 12,000 collection dockets were forwarded for collection for 1956 annual reports and at the end of 1957 only 122 remained for collection. In addition nearly 5,000 collection dockets were forwarded for other than 1956 annual reports.

During the year the Regional Offices staffs were involved in an increasing number of activities, and resources for emergencies and special inquiries were very short. Some of the additional projects were: increasing the pricing activities; more detailed surveys of rents; field operations in connection with the forth-coming survey of farm incomes and expenditures; intensified field work for response research in the labour force survey area; and advance field and mapping work for the 1961 Census.

The staff of the Division continued to provide technical assistance for other Divisions of the Bureau and for other government departments. A survey for the Research and Development Division was designed was designed to provide income data on non-farm households. Technical assistance was provided for the Health and Welfare Division in establishing variance estimates for the data obtained in the Canadian Sickness Survey.

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Canada Statistics, 1959



Annual Report



DOMINION BUREAU OF STATISTICS

For the Fiscal Year ended March 31, 1959

DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS

CATALOGUE No.

11-201

ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1959



CANADA

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1960

*To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada,*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1959.

Respectfully submitted,

A handwritten signature in dark ink, reading "Gordon Churchill". The signature is fluid and cursive, with the first name "Gordon" and the last name "Churchill" clearly distinguishable.

Minister of Trade and Commerce

Ottawa, Canada
January 1960

REPORT OF THE DOMINION STATISTICIAN

*THE HONOURABLE GORDON CHURCHILL,
MINISTER OF TRADE AND COMMERCE,
OTTAWA.*

Sir, — The year 1958-59 marks the fortieth year of the Dominion Bureau of Statistics which assumed its responsibilities as a central statistical agency in 1918. Growth during forty years has been almost continuous and pressure for Dominion Bureau of Statistics services from government business and the public continues. At April 1, 1959 the staff numbered some 1,700. Since that date additional duties have been assumed and some further increase in staff has taken place. Need for additional services led to growth during the year in such fields as judicial statistics, hospital statistics and pension fund statistics. More complete information relating to crime and the administration of justice was required. This was caused by developments in the correctional field, notably the establishment of a National Parole Board, and by growing public concern with the consequences of crime and delinquency. Development of a joint federal-provincial hospital insurance programme has called for more precise information on the operation and utilization of hospital services; the spread of industrial pension schemes has led to public and governmental interest in their social and financial characteristics.

Although less rapid growth took place in the more fully developed fields of the Dominion Bureau of Statistics activities, pressure on resources continued and efforts were made to increase efficiency by improved organization and by better central administration. A major re-organization was initiated in the Industry and Merchandising Division to achieve more effective use of both clerical and professional staff. The results of this re-organization will be studied carefully to determine whether some of the principles involved may have a wider application. A new position of an organization and classification officer in the central administration of the Dominion Bureau of Statistics has been filled, and plans are under way for the addition of a well-qualified staff training officer.

Planning was pushed forward during the year for acquisition of a large-sized electronic computer which will constitute the heart of a computer centre to serve both the Dominion Bureau of Statistics and other government departments. The first major task of the computer, expected to be delivered late in 1960, will be the processing of the 1961 Census of Population, Housing and Agriculture.

Like other employers, DBS is confronted with a shortage of qualified professional personnel and attaches importance to the efficient utilization of present staff resources, and to the development of junior staff into positions of greater responsibility. A series of courses, designed to develop a degree

of sampling skills within divisions, has been initiated in the theory and practice of sampling in order to utilize this economical method of collection and to make optimum use of our small group of sampling specialists.

Increasing attention was devoted during the year to preparation for the 1961 Census of Population, Housing and Agriculture. Surveys were made of the needs of users of census material, and detailed planning was commenced on census procedures. New recording and tabulation equipment, including an electronic document reader and the large electronic computer, necessitate the completion of many aspects of the census operation earlier than in the past.

An important survey of farm and farm-family expenditure and income was undertaken during the year to provide an up-to-date basis for statistics on farm finance and production which are of growing importance to governments and farm organizations.

Close contact was maintained with government and other suppliers and users of statistics and with international agencies. A most helpful one-week conference was held at DBS in October 1958 with a group of senior statisticians of the United Kingdom government, led by the Director of the United Kingdom Central Statistical Office. Throughout the year officers studying under the Colombo Plan and United Nations auspices spent extended periods in DBS studying the work of the agency.

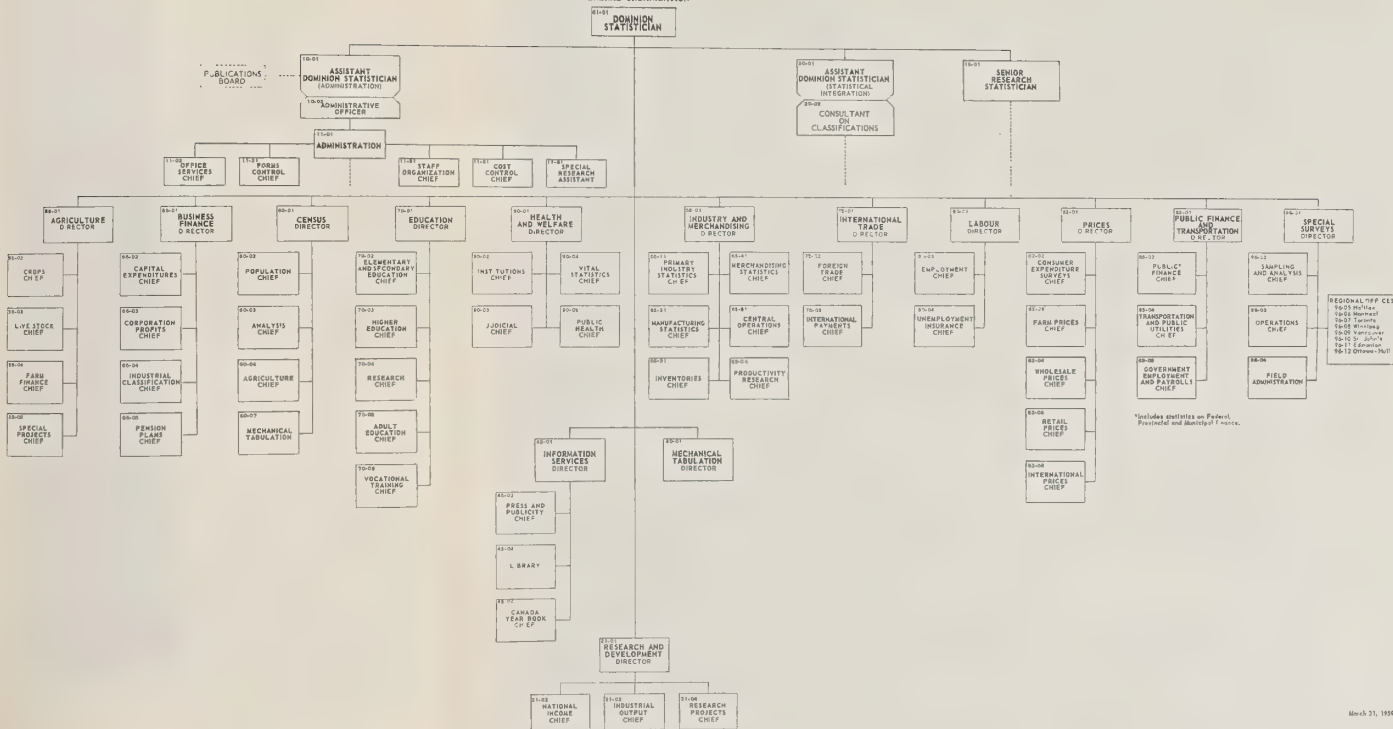
A more detailed review of operations of DBS follows, describing briefly the structure of the various divisions and their evolution in meeting the growing needs of the Canadian community for detailed and accurate statistical information on Canadian social and economic life. The accomplishments of the past year reflect the effectiveness with which the individual members of the staff performed their day-to-day duties.

Walter E. Duffett

Dominion Statistician

Ottawa, Canada
January 1960

DOMINION BUREAU OF STATISTICS GENERAL ORGANIZATION



DOMINION BUREAU OF STATISTICS

Chart showing organization

March 31, 1959

ADMINISTRATION DIVISION

The division is charged with operating many services necessary for the effective functioning of the organization, including personnel administration, office services, accounts and budgetary control, and forms design. Recently the division assumed responsibility for studies preparatory to the selection and installation of an electronic data processing centre.

A study, commenced in 1958, to assess the feasibility of a proposal for a Data Processing Centre in the Dominion Bureau of Statistics was completed during the year. A report was presented to the Interdepartmental Committee on Electronic Computers and this Committee concurred that such a centre should be established. The recommendation was accepted by Treasury Board and a Treasury Board Minute granted authority to proceed with the plans.

In the course of the feasibility study thirteen suppliers were provided with specifications and requested to submit proposals for a data processing system. Among other considerations suppliers were requested to give particular attention to equipment capable of translating census data collected in the field directly to magnetic tape. While some suppliers failed to respond with proposals, a number of systems were submitted for study. These were examined carefully and the IBM 705 model III computer, together with a Document-To-Tape Reader, was selected.

Apart from using the installation for processing the 1961 Census of Canada, it is proposed that a considerable number of regular statistical series will be processed on the system. These will probably include employment and payrolls, federal employment, monthly labour force, imports and exports, etc., as well as seasonal adjustment of economic indicators.

The personnel section is concerned with a wide range of services to the staff and co-operates with the Civil Service Commission in the selection and appointment of new employees. The section assists in the preparation of the annual establishment review for presentation to the Minister and Treasury Board at the time of the main estimates.

During this last year provision was made for a continuing position of an Organization and Classification Officer. The size of the Dominion Bureau of Statistics and the technical nature of the work performed warrants employment of an officer at a responsible level to devote his full attention to matters of organization and establishment and to act in a liaison capacity with the Civil Service Commission.

The Office Services Section maintained addressograph, drafting, varityping, mail and messenger, supply and typing services.

The Forms Control Section, established some years ago to assist in the simplification of paper work, contributed during the year to the revision of procedures employed in distributing Dominion Bureau of Statistics publications.

The Accounts Section is responsible for preparing estimates of the funds needed to operate the organization and to maintain proper control over expenditure.

During the fiscal year ninety suggestions were received and evaluated by the Suggestions Award Board. A total of twenty-four awards were granted of which ten were for cash totalling in excess of \$1,000. The fourteen remaining were merchandise of which ten were small, amounting to token awards.

Development of suitable and consistent classifications for statistical material is of great importance to the work of the Dominion Bureau of Statistics. Under the guidance of the Consultant on Classifications work continued on the preparation and implementation of standard, industrial, commodity and occupational classifications. A draft *Revised Standard Industrial Classification Manual*, was distributed to interested persons and firms requesting comments and suggestions and leading to the completion of a final revised draft of that document. Under the direction of the Consultant on Classifications, work began on a standard list of establishments while the *Index to the Standard Commodity Classifications* was completed.

The Advisory Board of Publications was established some years ago to assist the Dominion Statistician in ensuring the orderly publication of DBS documents. Throughout the past year, as well as exercising its normal functions, the Board acted with officials of the Information Services Division and the Queen's Printer in revising arrangements for the distribution of Dominion Bureau of Statistics publications. The new publications policy, implemented in January 1959, involved substantial price increases in order to bring prices charged more closely into line with the printing costs.

AGRICULTURE DIVISION

The functions of the Agriculture Division include the study of statistical material to be collected from agriculture, the collection and compilation of current data, the preparation of reports and the answering of inquiries. These reports and inquiries are concerned with production, distribution and use of agricultural products, quantities and cost of goods and services used by farmers, and the income accruing to farmers.

The Dominion Bureau of Statistics does not collect all the statistics concerning the agriculture industry. The Board of Grain Commissioners and the Canada Department of Agriculture in the course of their regular work provide commercial marketing data for grains, seeds and a number of livestock and livestock products. The Census Division of DBS collects data on the structure of the agriculture industry, and other divisions collect data on prices and utilization of farm products. The Agriculture Division is responsible mainly for collection of current data at the farm level. However, in the case of some agricultural manufacturing plants, such as dairy factories and flour mills, surveys are conducted monthly on a full-coverage basis. In other areas of agricultural activity sampling techniques are used. Among the sample surveys are: the June and December crop and livestock surveys from which estimates of crop acreages and numbers of livestock are made; seasonal crop surveys (field crops, oil seeds, fruits and vegetables); monthly

farm prices; and poultry, dairy, fur farm and hog surveys. For the dairy factory surveys and some of the farm surveys, the provinces co-operate with the Dominion Bureau of Statistics in the collection and tabulation of data.

The Agriculture Division is comprised of four sections: Crops, Livestock, Special Projects and Farm Finance. There is one field office situated at Truro, Nova Scotia, established to aid in developing agricultural statistical work in the Atlantic Provinces.

Work in the Crops Section during the year involved the extension of the new survey of yields on summerfallow and stubble to all three of the Prairie Provinces. Data were also obtained from this survey on the proportions of the more important crops sown on summerfallow. This was undertaken at the request of several agencies including the Provincial Department of Agriculture. The data so obtained have been useful, not only to agencies outside the Dominion Bureau of Statistics, but to the Crops Section in appraising the accuracy of its own crop estimates.

In a continuing search to find methods to improve its own techniques of crop forecasting the section maintained liaison with the United States Department of Agriculture where field work in Kansas was observed. Records of the weights of samples of crops growing under different conditions of light, moisture, heat, etc., are kept at various stages of the crop season. These are related to the final yield obtained from the crops when they are harvested. Experiments indicate the possibility of forecasting final yields from this background information by comparing weights of samples taken at selected times with the yields of crops supplying similar weight samples at comparable points of time in the growing season.

Further studies were made during 1958-59 on methods of estimating stocks of grain on farms. Survey questionnaires were reviewed and changes made where warranted. The small fruits surveys were strengthened while the estimating program for vegetable crops was extended, making data available for some crops not covered previously.

A re-organization of the clerical operations within the Livestock Section was undertaken. Many of the clerical staffs of the Dairy, Poultry and Livestock Estimates Units were amalgamated into a single clerical pool. This was undertaken to improve over-all efficiency and broaden the knowledge and usefulness of the individual clerks.

Because of changing production and marketing conditions for poultry along with rapidly increasing specialization among producers, changes were necessary in schedules used in surveying this industry. Work was carried out by the Interdepartmental Statistics Committee on the Department of Agriculture schedules used in obtaining additional breakdowns of data on chick hatches, output for broiler production and turkey poult hatch. Dominion Bureau of Statistics schedules for the special turkey survey were redesigned and, in co-operation with the Farm Economics and Statistics Division of the Ontario Department of Agriculture, a special survey was conducted of commercial duck and goose farms.

The Special Projects Section was fully engaged during the year, in co-operation with other divisions of the Dominion Bureau of Statistics and with the Department of Agriculture, in making a sample survey of farm-family expenditure and income during 1958, designed to yield information on a provincial basis of the principal items of income and expenditure. A sample of 9,700 farms was used for the farm business expenditure and income survey and a sample of 4,000 farms for the survey of family living expenditure. The considerable array of material on expenditure and income will provide a background of data in areas where statistics have not existed to date. For instance, knowledge will be gained of the distribution of income among farm families by size and source of income, together with estimates of income received by farm families from sources other than the farm. The statistics will be used for establishing benchmarks for farm finance data and weights in indexes of prices paid by farmers.

During the year the Farm Finance Section completed revisions of farm income estimates based on data made available from the 1951 and 1956 censuses of agriculture. In the process of revision an attempt was made to include some of the expense items which up to this time had been omitted because of lack of information; this included such items as electricity, feeder cattle purchases and certain livestock services. Revisions were also completed for the estimated values of farm capital, which includes farm land and buildings, machinery and livestock.

BUSINESS FINANCE DIVISION

During the year the title of the division was changed from General Assignments to Business Finance to better describe its functions. It consists of four sections—Capital Expenditures, Industrial Classification (formerly Forecast Surveys, and Organization and Planning respectively), Corporation Profits and Pension Plans.

Work of the Capital Expenditures Section consists of gathering and publishing information concerning investment intentions of both private and public sectors in the fields of construction, including housing, and machinery and equipment. It is important that business and government have prior knowledge of such intentions because expenditures of this kind exercise considerable impact on the general level of economic activity, while the size and content of the program is a valuable indicator of the demands likely to be placed on various segments of Canadian business and manpower in carrying out the program.

The report, *Private and Public Investment in Canada, Outlook 1959*, issued during the last quarter of the fiscal year, covered capital spending intentions for 1959 as reflected at the end of 1958, together with comparative figures for 1957 and 1958.

Building Permits, released monthly, provides data for one thousand municipalities which are used to determine trends in construction activity at the local level.

A publication *Construction in Canada 1956-1958*, was released during the year. The increased number of requests for information on the construction industry led to an investigation to determine the areas of construction statistics requiring development.

In the Corporation Profits Section estimates of profits and related data of incorporated Canadian companies were released for the fourth quarter of 1957 and the first three quarters of 1958. Arrangements were made for this section to assume responsibility for certain work on corporate taxation previously done in the Research and Development Division and required for the National Accounts and Corporation Profits figures.

In the Industrial Classification Section a report, *Industrial Research - Development Expenditures in Canada, 1957*, was released showing the magnitude and direction of research activities conducted by Canadian industry. Preparatory work was carried out for a corresponding survey of research-development activity conducted by federal government departments and agencies. This is the first step in expanding the research survey into the non-industrial field, in an attempt to secure knowledge of all research activity in Canada.

The survey of new establishments continued throughout the year, with the information so gathered published in June and December 1958, and providing the names, addresses and principal products of over 4,000 new firms. Although centred on manufacturing, the survey was expanded during the last quarter to include wholesale trade.

To assist the Central Mortgage and Housing Corporation the section completed a survey of mortgage and agreements of sale held in estates, trusts and agencies. The section assumed responsibility for the monthly series, *Cheques Cashed in Clearing Centres*, and the quarterly series, *Commercial Failures Under Provisions of the Bankruptcy and Winding-Up Acts*, formerly the responsibility of the Research and Development Division. Preliminary work started on a standard list of establishments as used by the various divisions of the Dominion Bureau of Statistics in collecting data. When completed the basis will be laid for direct comparability of data throughout the organization.

The Pension Plans Section was set up during the year to assume and enlarge work on pension statistics formerly compiled in the Industrial Classification Section. The growth of such plans makes them an important medium for personal savings, and the large sum of money involved has far reaching implications in the fields of labour, welfare and finance.

CENSUS DIVISION

The Census Division is responsible for the Censuses of Population, Housing and Agriculture.

During the fiscal year, planning for the 1961 Decennial Census constituted the main activity of the division. Planning was initiated under the

direction of the Census Executive Committee, a policy-making group, of which the Dominion Statistician is Chairman and which includes directors and statisticians of a number of divisions as well as personnel from the Census Division itself. The Census Executive Committee held twenty-seven meetings during the year and, in addition, numerous meetings were held by the various working committees existing to arrange details of organization, planning and subject matter. Two new working committees were formed to deal with training and publicity.

Arrangements for the census were affected by the decision to purchase electronic data processing equipment for use in the Dominion Bureau of Statistics. This decision made it possible to proceed with the planning of a comprehensive Census Test as early as June 1959. This test, a full-scale enumeration of two towns in Ontario and Quebec, served as a "dry-run" for checking the efficiency of training, field operations and processing procedures.

Activities of the Population and Agriculture Sections were largely centred in preparation for the 1961 Census and the Census Test. Innovations under consideration for use in the 1961 Census and coming under test in June 1959 are: a new form of document for use with electronic data processing equipment, use of sample methods to obtain certain population data and utilization of the services of postal carriers for the purpose of insuring more complete coverage. Tentative plans for a tabulation program have been outlined and preliminary investigations started towards defining Census Tracts in major cities. Preliminary discussions were held concerning procedures for enumeration in northern areas of the country and the decision not to conduct a Census of Fisheries in 1961 was made.

In the Analysis Section, the regular series of estimates of population (quarterly, semi-annual and annual) were prepared and published as were the annual reports on citizenship statistics and estimates of numbers of families in Canada in 1957. In addition, a study of labour force characteristics of post-war immigration was made, as well as the preparation and publication of several analytical reports on the 1956 Census.

In the Administration Section some 55,000 requests were received for assistance in establishing age from early census records and for information from National Registration records. Approximately 2,000 letters were received asking for information concerning the census. The 1921 Census Index was completed in November 1958 and a complete set of microfile cards was sent to the Regional Director of Old Age Security in each province.

Close collaboration with the U.S. Bureau of the Census in Washington continued. Committee personnel have been present at various U.S. Technical Advisory Committee meetings and there has been an exchange of observers for both U.S.A. and Canadian test and pre-test operations. An exchange of committee reports, technical papers and other census material has been maintained between the two countries.

EDUCATION DIVISION

The Education Division collects and publishes statistics of public and private elementary and secondary schools, vocational institutes and trade schools, colleges and universities, libraries, museums and adult educational activities. By analysis and interpretation the division makes significant comparisons of related data. One of its primary functions is the co-ordination of provincial educational statistics on a comparable basis for the entire nation.

In order to collect and co-ordinate such information the division co-operates closely with many organizations. Among the organizations with which close relations are maintained are federal government departments, provincial departments of education and private or professional groups and associations. Typical of the latter are the Canadian Teachers Federation, the Canadian Education Association, the Association Canadienne des Édicateurs de Langue Française and the Canadian Library Association. Liaison is maintained with the provincial departments through staff visits and through conferences and meetings. The Higher Education Section issued on a trial basis, a Christmas news letter, which was well received.

During the past year considerable emphasis was placed on the problem of speeding up the release of statistics. A start was made towards revising the regular publication, not only to include the latest information available, but also to improve the arrangement of the publication and to eliminate material no longer of interest. The coverage of the parts of the education field to be included in each publication was scrutinized and altered to meet current needs. Instances of this are the teachers' salary bulletins which have been made more comprehensive, yet easier to follow, and the survey of elementary and secondary education which has been remodelled prior to becoming an annual survey. An agenda was drawn up for the Fifth Dominion-Provincial Conference, planned for May 1959, and called to ensure greater comparability and wider coverage in statistics. It is expected that by 1960 the regular publications will all have been reviewed, the data better organized and the formats revised.

By processing current data while the previous material is being published, the timeliness of the statistics is being improved. For instance the *Survey of Elementary and Secondary Education, 1950-54* was published, while that for 1954-56 was prepared; *University Entrance Awards, 1958* and *Salaries and Qualifications of Teachers in Universities and Colleges, 1957-58* were released while others were prepared for press.

The Vocational Section co-operated with Canadian Vocational Training officials in conducting a survey and reporting on vocational education in Canada. A publication No. 5. *Vocational Training in Canada, A—Technical and Trade Training, Publicly-Operated* was produced. A second publication covering publicly-operated training facilities is being prepared. It is expected that regular publications on vocational education will be issued by DBS beginning 1959-60.

In addition to the preparation of regular publications, members of the division prepared special releases on such items as the financing of education, library statistics and scholarships. A chapter was prepared for UNESCO'S *World Survey of Education III, Secondary Education*.

HEALTH AND WELFARE DIVISION

Statistics published by the Health and Welfare Division are comprised of data on births, mortality, illness, health care, hospitalization, law enforcement and the administration of justice. Used by many organizations and individuals, the statistics are produced by four sections—Public Health, Vital Statistics, Institutional Statistics and Judicial Statistics.

During the year re-organization and staff development occurred in the division to keep pace with changes in the programs of the Department of Justice and the introduction of hospital insurance.

In the Public Health Section, while a number of improvements were made in existing statistics, particularly in series of notifiable diseases and home nursing activity, work was largely confined to preparing the traditional material and a comprehensive report on the Canadian Sickness Survey 1950-51.

A prime objective of the Vital Statistics Section was to speed up the release of routine annual tables of births, stillbirths, deaths and marriages. Improvement in release times was attained through efforts to secure returns more quickly from the provinces and by improving internal procedures for handling and processing the forms.

As a result of continuing demands for special compilations of vital statistics, an extension to include greater detail in annual tabulations occurred while a series of special reports was issued supplementing the regular annual issues. These special reports contained historical and brief analytical treatments of several types of fatal accidents, suicides, and leading and detailed causes of death.

During the year the seventh revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death was put into effect necessitating some changes in the operating practices of the section. In addition, the Section conducted a training course for other personnel in the health field required to use the classification in the course of their work.

The Institutions Section was affected by the introduction of national hospital insurance. With eight provinces signing agreements with the Federal Government, a considerable revision of the reporting system was introduced. The schedules were completely reviewed to take account of the needs of the Federal Department of Health and Welfare and the various provincial administrations. The increasing involvement of government in hospital financing also increased the need for more rapid release of hospital statistics; work methods were adjusted to accomplish faster handling with only a small increase in staff.

The section co-operated with Newfoundland in attempting to help that province with its program of hospital morbidity statistics.

In the Judicial Section major emphasis was placed on the development of police statistics. In September 1958, the Canadian Association of Chiefs of Police appointed a Committee on the Uniform Recording of Police Activities. A work group has been established within this committee. Dominion Bureau of Statistics officers are members of the Committee and of the work group. The Committee's objectives are to determine what kinds of information are required, to define concepts underlining the required information, and to specify the requirements for standard records and procedures for recording the information. In October a Committee on Statistics, including a Dominion Bureau of Statistics representative, was appointed at the Canadian Conference of Training Schools. A special tabulation of court data was prepared at the request of the Correctional Planning Committee of the Department of Justice.

INDUSTRY AND MERCHANDISING DIVISION

The division provides a wide range of statistics on selected Canadian industries. It conducts an annual Census of Industry covering manufacturing, mining, logging and fishing, as well as taking a decennial census of distribution including retailing, wholesaling and the service trades. Current data are provided monthly or quarterly on such aspects as the output of important commodities produced by many industries, and on manufacturers' shipments, inventories, new and unfilled orders. Material is also available on sales and inventories in wholesale and retail trade together with quarterly estimates of consumer credit. Special studies are conducted on industry, merchandising and related activities.

In early December 1958, a major change was made in the organization of the division. Under the previous system the division consisted of ten sections, each responsible for all aspects of the work relating to a particular area of industrial or trade activity, such as food and beverages, manufacturing, or mining. Statisticians under these circumstances were heavily involved in operational problems. In order to free their time for planning and development work, new arrangements were made whereby editing, compiling, and similar functions throughout the division were centralized, permitting more flexibility in staff arrangements, standardization of routine operations, and more opportunity for mechanical processing.

During the year, compilation of the 1957 Census of Manufacturing was completed about two months earlier than in the previous year and plans were made for taking a complete census of manufacturing in 1958. This would be the first complete census carried out since 1948. For the years 1949 to 1957 inclusive, coverage in the annual Census of Manufacturing was incomplete to the extent that small establishments in most industries were asked to report only the total value of their shipments. The other data (such as sales and consumption of materials) for these firms have been estimated from the

trend of shipments. In using such a system for estimating data it is necessary to assure that allowance is made, from time to time, for changing patterns of sales and consumption, etc. Further, allowance must be made for changes occurring in the types of statistical data required, which necessitates a more extensive survey from which to develop statistics for the future.

In planning for this complete Census, consideration was given to easing the reporting burden on the smaller firms. A relatively short form of questionnaire is being used for establishments which produce less than \$100,000 worth of goods a year. This form, though collecting all basic industrial information, does not require certain detailed breakdowns asked of large companies.

Planning provides for the use of three classes of questionnaires for use in subsequent annual censuses. With the objectives in mind of maintaining quality in the statistics produced, yet easing the burden of reporting, provision is being made to send "one-question" short forms to the smaller firms, while the large firms answer the detailed long form. Intermediate-sized establishments will receive a less detailed version of the longer form.

Statistical coverage in certain areas was improved and expanded with estimates of manufacturers' shipments being prepared for publication on a provincial basis. A survey of shipments, bookings and backlogs of steel fabricators was started.

The usual annual census of mines was carried out. It was decided to make more use of provincial records in the case of the crude petroleum and natural gas industry in Saskatchewan and Alberta. The division's questionnaires were modified accordingly.

In the case of statistics on fish landings, the division participates only in the compilation made for the Maritime Provinces. For other areas, the division assembles and publishes data supplied by federal and provincial departments. At Halifax, steps were taken, during the year under review, to change from a manual tabulating procedure to a combined manual and mechanical operation. This arrangement will permit supplying much additional data for use by the Fisheries Research Board and other agencies. A change was also made in the design of the questionnaire and in the method of collecting the annual data for the Maritime Provinces on men, boats and gear. The fisheries officers, who do the collecting, are now required to take a census of all fishermen in their respective areas, obtaining information on equipment owned, value of equipment, type of ownership, etc.

Efforts were made to improve the statistics on primary forestry operations. The division acted in an advisory capacity to the Province of New Brunswick in its sample survey designed to estimate timber cut on private woodlots in one forest district. Because the results were not entirely satisfactory plans are being prepared to repeat the survey in 1959-60, taking account of weaknesses in the sample design and supervision of enumerators. The Interdepartmental Advisory Committee on Forestry Statistics, of which the Director of Industry and Merchandising is Chairman, was active in assisting in the planning of the sample survey in New Brunswick, initiating a study

of statistical and administrative data available to the provincial forestry departments, preparing a questionnaire covering the output of farm woodlots for use in the 1961 Census and carrying out special studies of exports of forest products by province of origin rather than by province of exit.

In the area of merchandising statistics, estimates on sales by 20 retail and 18 wholesale trades were prepared as usual. In the former case efforts were made to provide separate totals for each of the Maritime Provinces and, in the latter, plans were laid for a complete survey dealing with the year 1958. Attention was given to 1961 Census of Wholesale Trade with questionnaires being prepared for the Census Test of 1959. Timeliness problems were under continuous review, with savings as high as two to three months achieved over release dates of regular publications by the use of the Daily Bulletin.

In an attempt to provide a breakdown, the first since 1951, of retail trade totals for each of the Maritime Provinces, an additional 3,000 independent stores were added to the sample for 1957. Unsatisfactory response prevented publishing the data on a provincial basis.

Other improvements and innovations were introduced. A shuttle-type form was introduced for the monthly retail sales survey during the early months of 1959. Coverage for the monthly survey of chain stores was improved for both sales and inventories. Surveys of vending machine operators and shopping centres were tried but first results of both proved unsatisfactory; the surveys are being repeated in 1959. Consumer credit statistics were extended to cover amounts outstanding on the books of certain utilities and transportation companies.

In wholesaling, preparations went forward for a survey of the year 1958 which would provide complete coverage of wholesalers proper and a sampling of agents and brokers. The complete survey of agents and brokers for the year 1957 was brought close to publication. Data for the years 1955-58, inclusive, covering sales and inventories of manufacturers' trading outlets was released in December 1958.

A survey was made of a number of wholesale firms to determine whether statistics on voluntary chain retail stores could be supplied. Some wholesalers have data on the chains they supply; others do not. Investigations are continuing.

A survey was made of respondents and subscribers to the series of studies on operating costs. It appears that, with some improvements, the studies are of sufficient interest to justify their continuation.

The annual survey of motion picture theatres was simplified by dropping establishments operated by community hall enterprises and services by itinerant operators of motion picture equipment.

INFORMATION SERVICES DIVISION

The division provides the focal point for the release of the Dominion Bureau of Statistics published information. In the course of this work it compiles and publishes the *Canada Year Book*, the handbook *Canada* and the DBS *Daily* and *Weekly Bulletins*. Its work includes the operation of the distribution services for publications, the library and a centre for answering general inquiries.

The section concerned with the production of the *Canada Year Book* and the handbook *Canada* divided its energies between two succeeding editions of each publication. In the case of the Year Book plans for the 1959 edition were well advanced before the 1957-58 edition was released in November, 1958. The Handbook was released in June 1958 and, throughout the period October 1958 to March 1959, *Canada 1959* was in process.

Continued efforts were made to expedite the publication of the French edition of both the Year Book and Handbook through the provision of a photocopy of the edited English copy, chapter by chapter as available, to the Translation Section.

The Press and Publicity Section works towards supplying DBS documents and information to the public and to government officials.

During the year the catalogue *Current Publications - Dominion Bureau of Statistics - 1959* was completely revised. The revision included a new subject grouping of all publications and the adoption of a permanent code number for each publication which could be used by subscribers in placing orders and filing, thus saving time in the maintenance of mailing lists.

The division, in close co-operation with other officers of the Dominion Bureau of Statistics and with the Queen's Printer, discontinued the long-standing practice of permitting a very substantial reduction in price when a subscriber took all DBS publications and introduced a revised system of prices and subscription rates. These steps were taken in an effort to bring DBS distribution into line with approved government policy wherein publications are priced to recover costs of printing.

The volume of correspondence requiring collection of material from various divisions, or needing special investigation before reply, remained heavy. Several displays publicizing DBS services were prepared for showing at conferences.

The *Daily* and *Weekly Bulletins* continued to act as a means of summarizing each day's and week's issues of reports as well as statistical releases not otherwise published.

One function of the library is to make available materials for use in research work, and its stock includes an increasing supply of books, periodicals, government documents and historical reports covering a wide variety of subjects. Strenuous efforts were made during the year to acquire new material of value, while many items, no longer of frequent use, were sent to the National Library or to a large number of universities and research libraries.

The library acquired 33,405 items, some 3,200 more than during the previous year and representing increases in all categories of documents. In a research library where normal development leads to doubling in size every 17 years, efforts to control material must be constant. Evaluation of material was done by a number of the regular staff familiar with resources and material and, because of the press of other work, was confined to areas where the need of shelf space required immediate action.

In 1950, a new catalogue was started with entries made to standard library practice. Intentions are to re-catalogue all material retained according to this system. During the year the cataloguing staff kept abreast of current material but has not been able to proceed with re-cataloguing except in urgent cases.

INTERNATIONAL TRADE DIVISION

The division provides statistical information covering a wide range of economic and financial transactions between Canada and other countries. It is composed of two main sections, one dealing with external commodity trade and the other with balance of payments, investment position and international travel.

During 1958, an analysis was completed of Canada's short-term external assets and liabilities. The new material makes possible the production of a more comprehensive statement of Canada's international investment position than has heretofore been available, and provides bench-mark data and additional light on short-term movements of capital. It is expected that this material can be made generally available in the near future.

Publication of statistics of Canada's international investment position has also been continued, although the time lag involved in their production has unfortunately increased with the sharp growth in the number of companies which have to be surveyed. A re-examination of various aspects of international investment which have not been examined for some years past had to be postponed. In order to cope with the growth in the number of companies in which there is foreign investment, a growth which in recent years has averaged about ten per cent per annum, arrangements are now being completed to introduce experimentally a triennial survey for the less active or less important companies currently covered by annual questionnaires.

Improvements were made in the format of the monthly report *Sales and Purchases of Securities Between Canada and Other Countries* to simplify presentation and to provide for inclusion of more comprehensive data.

The use to which external trade statistics are put demands that they be published promptly and in considerable detail by commodity and country. A regular publication schedule for export statistics was restored. The main monthly export report will now be published and distributed about five weeks after the close of the month to which it relates, as compared with about eight

weeks timing in recent years. The range of detail now shown in export statistics is, within the limits set by the secrecy provisions of the Statistics Act, apparently adequate to answer most questions raised by the public.

On the import side release dates were still slow and efforts to speed them up were under way. The main monthly import reports were published about sixteen weeks after the close of the month to which they related, rather than with the approximately nine weeks' lag which is economically feasible. The range of detail shown in import statistics has been somewhat curtailed in recent years, and the increasingly important special analyses of "basket" import classifications have been virtually eliminated.

During the year, certain statements which duplicated, or partially duplicated regular monthly reports were discontinued, an economy which permitted the increasing load of regular operations to continue without enlarging the establishment. The study of the significance of small value shipments in import statistics was largely completed, but further change in existing coding practices was avoided for the present.

Changes were made in the area of travel statistics. New tabulations were made on the length of visits of Canadian travellers in the U.S.A. using non-automobile type of transportation.

Towards the end of the year studies were made, in conjunction with the Department of National Revenue, on the effects of simplifying present administrative procedures in admitting foreign vehicles into Canada. Administrative changes which have been proposed by that Department will have major effects in the coming year on some of the statistical sources now used in estimating expenditures of United States visitors to Canada by automobile. As a result, it is likely that there will be a reduction in the available information on which these estimated expenditures are based and it is anticipated that a greater volume of documents covering automobile visits to Canada will have to be tabulated in order to analyse this heavy traffic.

The redesigning of the schedule used for Canadians reporting on visits to the United States made it possible to gather additional information on overseas travel via the United States, by giving respondents the opportunity to report the overseas and United States portions of the trip separately.

LABOUR DIVISION

A separate division for labour statistics was established in the summer of 1958. It consists of three units: the Employment Section, the Unemployment Insurance Section, and a small unit concerned with research and the estimation of labour income. The Employment Section collects industrial establishment records of employment, hours of work, and wages and salaries. It publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The Unemployment Insurance Section provides the Unemployment Insurance Commission with operational statistics. It publishes statistics concerned with unemployment, unemployment insurance claims and the amounts of benefits received by beneficiaries. The Labour Income and

Research Unit issues labour income estimates and undertakes research and analysis pertaining to the general field of labour statistics.

In the Employment Section, methods of compiling monthly statistics on industrial employment and payrolls by further mechanical means were introduced. The procedure simplifies the processing operation as well as representing a preparatory step in the transition to electronic computers.

Certain historical tables, valuable to users, do not need to be reproduced in their entirety each month. By alternating a number of these, economies were made in printing the monthly *Employment and Payrolls* publication.

In order to make employment and payroll statistics more readily comparable with other series, the data in monthly reports were identified with the last pay period of the month where formerly they had been identified with the first day of the following month.

In an attempt to learn how the statistics are used and to obtain suggestions on how they might be made more useful, two questionnaires were sent to subscribers. Replies indicated that per capita earnings figures are used widely by industrial relations and labour union groups in wage and salary negotiations. Detailed data showing the finest possible industry-area breakdowns are sought for this purpose. Market and economic analysts wish to have information regarding levels and trends in employment and earnings, and here again industry-area detail was reported to be valuable.

In the Unemployment Insurance Section a consolidation of staff contributed to better co-ordination of work and some reduction in the handling of documents. Studies were made of the implications of recently introduced punch card equipment to the production of statistics on benefits and claimants in the Regional Offices of the Unemployment Insurance Commission.

A number of special projects, such as those to assist the Unemployment Insurance Commission and the Actuary, were undertaken. From data available on the individual characteristics of claimants it is possible to make studies of particular groups, such as those on seasonal benefit and those failing to qualify for benefits of any kind. Studies of contribution records of different groups throw light on the actuarial aspects of the insurance scheme.

The Labour Income and Research Unit completed a historical revision of labour income estimates. Labour income estimates include all wages and salaries and provide a useful indication of regional differences in the size and movement of this large component of personal income. The monthly reports now show data for five regions along with national totals and some industry sub-totals. During the year, time was devoted to the study of relationships between different measures of employment and unemployment.

MECHANICAL TABULATION DIVISION

The subject matter divisions gather quantities of data which form the basis for statistical tables. A large part of this material is processed by the Mechanical Tabulation Division, a service division, using a variety of mechanical equipment.

The greatest part of the work is done on punch card equipment. About 40 p.c. of the staff record the data from the source documents onto punch cards in the form of positioned holes. One group of operators punches the cards and a second group verifies independently the accuracy of the data recorded. A further 40 p.c. of the staff operate a variety of other punch card equipment, such as sorters and tabulators, to group the punch cards by characteristics of the data and to produce in printed form the totals required.

The remainder of the staff operate comptometers and desk calculators to produce aggregates directly from data recorded on source documents. Most of these are in the form of "peg-bar" schedules which are particularly adaptable to speedy adding operations.

Most of the work of the division during the year involved monthly, quarterly and annual tabulation programs which are largely repetitive. However, a large number of requests for special tabulations were handled during the course of the year. As in past years, quite a number of projects were undertaken for other government departments and agencies who did not have the facilities required. These were handled on a cost reimbursement basis under individual agreements. Tabulation services for the Immigration Branch were continued and considerable work was carried out for the Department of Labour, particularly in connection with surveys of wage rates and of members of scientific and technical professions. The extensive program of tabulations undertaken for the Department of Insurance in connection with its periodic evaluation of the Public Service Superannuation Account was all but brought to conclusion by the end of the year.

For some time, fish landings on the east coast have been tabulated in Halifax using proof machines, a form of adding machine. The Department of Fisheries requested additional cross-classifications of the data which could not be obtained in this manner. Following a review of the requirements and techniques, a punch card system was introduced. A key-punch unit was installed in our office in Halifax and arrangements were made for the Maritime Life Assurance Company to undertake monthly tabulations in Halifax.

Punching of cards was undertaken for the Department of Public Works in connection with the calculation of the "cut and fill" required on highway contracts. These were prepared as input for a computer. Atomic Energy of Canada Limited and the Dominion Bureau of Statistics co-operated in studies of family linkage of vital and health records; the division prepared the punch cards and tabulations required.

New and established procedures were under a continuing review. Vital Statistics punch cards have been produced from microfilm records received from the provinces. On a pilot basis, the punch cards for part of the project have been produced directly from the microfilm records. Some additional information is required on the original record prior to microfilming and some coding is done by the puncher as the cards are produced, but a fairly lengthy clerical operation is being substantially reduced.

PRICES DIVISION

The division was created in September 1958 by a separation of the former Labour and Prices Division into two divisions. It was felt that the separation would permit more effective co-ordination within the fields of both labour and prices, consequently providing more satisfactory services to users.

The division whose purpose is to collect and publish prices and urban consumer expenditure data is composed of five operating sections: Consumer Expenditure Surveys, Farm Prices, Wholesale Prices, Retail Prices and International Prices.

During the first months of its operation the resources of the division have been devoted to three main projects: the continuing production of weekly and monthly price statistics, the development of new price series to meet current needs and assisting with the farm survey of income and expenditure.

In the Consumer Expenditure Surveys Section, efforts were directed to the processing and analysis of expenditure data collected in urban family expenditure surveys taken during the calendar year 1957 and the early months of 1958. The 1957 program was the third in a series of small-sample biennial surveys designed to obtain expenditure information for a cross-section of urban families. The prime purpose of the surveys is to permit adjustment to the revision of the weights of the Consumer Price Index. However, aside from their use in the determination of price statistics, the resultant body of expenditure statistics is a primary source of information to manufacturers, distributors, market research organizations and welfare agencies concerning expenditures by Canadian families.

In 1953, 1955 and 1957, the survey programs consisted of a series of monthly food surveys throughout the year, followed by a retrospective survey covering the complete family budget for the same year. In 1957, a larger body of data was collected, the use of a panel of families was introduced, and the design of the food schedule was changed.

The processing of 1957 food expenditure records extended into 1958-59 owing to more complex tabulations involving data for matched-sample families from month to month, as well as all-family totals. This information was used by the Retail Prices Section for a study of expenditure change in seasonal food items, preparatory to a revision of the Consumer Price Index. Information collected in January 1958, covering total family expenditures and income for almost one hundred families in nine cities, was edited and tabulated in 1959.

The Farm Prices Section published, on a weekly, monthly or thrice-annual basis, price indexes at wholesale and retail levels covering farm and industrial commodities, building materials, and prices paid by farmers, as well as common and preferred stocks. In addition, the staff was engaged in a number of developmental projects.

In co-operation with the Agriculture Division, this section continued to work towards successful completion of the Survey of Farm Income and Expenditure. During the latter half of the year the statistician in charge of the index of prices paid by farmers devoted almost all of his time to the training

and supervising of field staff required for the farm survey, and to preparing the ground-work for processing of the data by electronic computer. The interest of the Farm Prices Section in this survey arises from the fact that a major revision of the index of *Commodities and Services Used by Farmers* is dependent upon results of the survey.

Price collection of industrial machinery and equipment was further expanded.

Brief preliminary studies were made in connection with the calculation of new price indexes of highway construction and electric generating installations. These indexes are being calculated at the request of road and electrical associations who will use them in planning and evaluating construction progress and in connection with cost estimates and rate and depreciation studies. They will be used by provincial and federal authorities for similar purposes, and for the expression of value figures in quantity terms.

In the Wholesale Prices Section, next-to-final steps were taken towards the publication of new wholesale price indexes. These new indexes have been calculated to remedy a number of inadequacies of the present wholesale indexes and are in response to criticisms of users in both government and industry. In the course of commenting on currently available series, users indicated requirements for price indexes based on an industry classification to supplement existing commodity classified series, and for a wide variety of price indexes of manufactured commodities. This is the broad background to the output price indexes for manufacturing industries which have been in the course of preparation for some years. A large number of industry indexes have now been calculated, and a reference paper explaining them is being prepared.

This project, begun in 1956, caused a substantial increase in the activities of the section. The number of price series involved was four to five times greater than that being collected for existing indexes. This, combined with a program to improve substantially the quality of price information, entailed considerations of staff enlargement and economies in the use of available resources. In this connection, a re-organization of duties on a functional basis coupled with more efficient techniques and forms produced a more integrated and productive work flow.

Manufacturers have been most co-operative in this project and those with whom we have worked most closely believe that the resultant price indexes will repay their efforts. It is, of course, the concern of the section to see that they do.

Liaison with users has also been given special emphasis. Part of the duties of two new commodity officers is to visit manufacturers for discussion of reporting problems. At the same time, they assist manufacturers in their price statistics requirements.

The Retail Prices Section's main activity during 1958-59 was the production, on a regular monthly basis, of the Consumer Price Index. In addition to the regular program of price collection, processing and index calculation required to produce this index, a wide variety of related operations were carried out involving the maintenance and revision of commodity

specifications, schedule design and revision, selection of pricing outlets and constant review of pricing techniques and procedures in the light of changing merchandising practices.

The program of continually reviewing the budget content of the Consumer Price Index was accelerated during the current year as tabulations from the 1957 expenditure surveys became available. A number of aspects of index number calculation were reviewed preparatory to a revision of the Consumer Price Index.

Among the more significant projects completed during the past year was the changeover to an expanded rent schedule and absorption by the section of the responsibility for rent calculations. This survey is now yielding significant data on rent attributes as well as rent indexes for the Consumer Price Index.

In the International Prices Section, measurement of comparative living costs at cities outside Canada, for the purpose of adjusting allowances of Canadian Government foreign service personnel, has been facilitated by the recent development of a continuous review system aimed at maintaining a constant check on the validity of our international indexes in the face of rapidly changing price and exchange rate situations abroad. It is based on a monthly assessment of conditions at each foreign post in the light of all relevant information regularly obtained from governmental and business sources overseas. It has thus been possible to reduce the frequency of price surveys at many locations, at a time when the number of foreign posts has continued to increase.

Continuing the program of gaining first-hand knowledge of living conditions being encountered by foreign service personnel, the Section Chief visited all Canadian posts in Latin America and the Caribbean. The year was also characterized by intensified studies, in co-operation with other government departments, preliminary to the revision of the structure of the Canadian foreign allowance system.

With the coming into effect of new regulations for the payment of allowances to government employees stationed in northern and isolated areas of Canada, the section became responsible for the measurement of relative food costs between such locations, and population centres in southern Canada. During the course of the year, indexes based on food price surveys at over one hundred locations were recommended.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

The division, consisting of three operating sections, is charged with the preparation of a wide range of statistics on the financial structure of the three levels of government in Canada, employment and payrolls of government bodies, and the operations of the transportation and public utilities industries.

The Public Finance Section having recently established a series on "actual" finance statistics of the Government of Canada, published a report

on federal "estimates", "preliminary" revenue and expenditure, and "interim" debt. In the field of provincial finance statistics the first "interim" report of debt was released. Because of the great interest in inter-government contributions and transfers, a table was introduced into the provincial revenue and expenditure estimates report to show payments to local governments.

The report *Consolidated Public Finance Statistics*, which brings together the revenues, expenditures and debt of all governments in Canada, federal, provincial and municipal, on an "actual" basis, was improved during 1957-58 by the addition of a table showing net general revenue of all governments adjusted to show the net percentage of total revenue accruing to each level of government after transfers between governments.

Following the Seventh Dominion-Provincial Conference on Municipal Statistics, work was commenced on preparing the revised *Municipal Finance Reporting Manual*, incorporating the numerous changes recommended by the Conference concerning the items that municipalities should report and the style that the reports should take. As was the case with previous editions, it was recommended that the revised Manual be made available to all municipal treasurers and auditors. The volume is also widely used as a text and reference document.

The regular reports on municipal statistics "actual", "preliminary" and "estimates", were published, and to the latter was added the "interim" report on debt. There seems to be reluctance on the part of some municipalities in the group being sampled to complete the questionnaire forms on preliminary and estimated figures, but most are co-operative. Education of officials over a period of years as to the need for the statistics and for early response may progressively improve the currency of this report.

In the Government Employment and Payrolls Section, improvements in the timeliness, accuracy and completeness of the monthly *Federal Government Employment* and quarterly *Provincial Government Employment* reports were achieved. Progress was made towards adoption of uniform location codes between the Civil Service Commission and the Dominion Bureau of Statistics.

The *Federal Government Employment* report for April 1958 contained an extended and improved description of the methods of collection and processing as well as a more complete and improved glossary of terms. It is intended that the April report of each year will contain similar data. At the end of the fiscal year the regular monthly publication had to be delayed in order that special tabulations might be prepared for the Pay Research Bureau. In addition special data were prepared for the Health and Welfare Division and the Unemployment Insurance Section.

Improvements were made in the completeness and accuracy of federal and provincial employment statistics. Changes in processing techniques involved additional mechanization and alterations in the coding system. Date of birth information was added in the case of federal civil servants, while the records were expanded to cover the teaching staffs of the Departments of Citizenship and Immigration and Northern Affairs and National Resources.

Plans were made to release data each quarter on total provincial government employment in the *Daily Bulletin*, while coverage was increased to include a number of agencies not previously included.

The operations of the Transportation and Public Utilities Section were arranged into three units during the year. These specialized in Road Transport, Rail, Water and Air Transport and in Pipelines, Communications and Utilities.

The first national estimates of motor transport traffic were made possible by the high degree of co-operation received from the truckers and the provincial governments. Because of the growing interest in statistics of ton-miles and weight of goods carried, the survey is being adjusted to improve the data concerning the extent to which the industry competes with other forms of transportation. The adjustments will permit the Dominion Bureau of Statistics to meet specific demands for increased detail such as more commodity statistics, more reliable interprovincial traffic data, and truck traffic classified by length of haul.

Efforts were made to assure that these additional demands for statistics were met in an economical way. To facilitate the compilation of these additional statistics without increasing staff resources, plans were made to introduce a punch card system of tabulation. Work methods and procedures were under continuous review with the object of economizing operations as much as possible. To this end plans were made to test the adequacy of a short form, the utilization of which would considerably reduce handling costs and improve response among certain classes of trucks.

In order to show the growth of the relatively new type of transport service, "piggyback" traffic, arrangements were completed to collect and publish information on "Trailer-on-Flat-Car" operations by class I and II railways.

The annual *Shipping Report 1957*, introduced data for non-customs ports. Shipping schedules are now received from vessels calling at non-customs ports as well as at customs ports and the large discrepancy which existed in previous annual publications between totals for cargo loaded and unloaded in coastwise trade has been largely eliminated. For Canadian National Steamships operating in Newfoundland waters, a new schedule has been devised which allows each vessel to make one report for all the calls of one trip, instead of submitting one report for every port of call. Prior to the opening of the St. Lawrence Seaway, a joint schedule was designed, with the St. Lawrence Seaway Authority, to be used by vessels which pass through the canal system under the jurisdiction of the Seaway Authority.

At the request of the Air Transport Board an air passenger survey of transatlantic and polar flights was begun on January 1, 1959. Preliminary results have already been tabulated for the information of some airlines and it is intended that some data will be published. Discussions were held with the Department of Transport to develop Airport Statistics to provide air traffic movements similar to the port activities reported in *Shipping Statistics*. The Department of Transport plans initially to collect statistics for the larger airports under its jurisdiction, and the Dominion Bureau of Statistics will collect data for those airports over which the Department of Transport has

no control. The material will be combined to form the basis for a report on airport statistics.

Progress was made in developing gas pipeline statistics while, in January, the division assumed responsibility for the monthly report *Sales of Manufactured and Natural Gas* previously produced by the Industry and Merchandising Division. This will form part of the statistical series on gas distribution and transmission which is being developed in the division.

RESEARCH AND DEVELOPMENT DIVISION

This division is responsible for several important statistical publications such as the *National Accounts* and *Canadian Statistical Review*. In addition, new or continuing research projects are undertaken resulting in occasional publications of a research nature.

During the year the National Income Section published the regular quarterly National Accounts while completing the basic Canadian reference document *National Accounts, Income and Expenditure, 1926-1956*. This document contains a description of concepts, sources and methods, as well as charts and an analysis of the Canadian economy as illustrated by the national accounts material over the thirty year period. The data were brought up to date in the regular annual report *National Accounts, Income and Expenditure, 1955-1957*.

Efforts were made to shorten operational procedures while at the same time to improve the quality and usefulness of the statistics. Arrangements were made to transfer much of the work on the seasonal adjustment of the national accounts series to electronic computers. This permits not only faster processing but also allows more thorough analysis of the data. Research was pressed to find a way by which quarter to quarter comparisons of movements in volume of output and in prices could be made.

At the end of the year, the Business Statistics Section was renamed the Industrial Output Unit. The work was re-organized as a consequence of the transfer of the chief of the section to the Industry and Merchandising Division. The work on cheques cashed and commercial failures was transferred to the Business Finance Division, while the *Canadian Statistical Review* and its supplement were placed in charge of the assistant to the director. The remainder of the original Section was then changed to Industrial Output Unit, reporting to the Chief of the National Income Section. The National Income Section in turn is giving a very high priority to the development of the new measure of Real Gross Domestic Product by industry.

During the year work was completed on the *Revised Index of Industrial Production 1935-1957 (1949=100)* and a basic reference document dealing with concepts, methods and analysis was released. In February the new series replaced the old index in the *Canadian Statistical Review*. At the same time the number of seasonally adjusted industry indexes in the publication were increased greatly.

Estimates of total Canadian production by industry were prepared quarterly for use in conjunction with the National Accounts and other releases. Extensively used in the analysis of economic trends, the real output project is still on an experimental basis, though it is hoped eventually to publish this new type of production statistics.

A major historical revision of the Survey of Production was completed, covering the period 1926 to 1956. The Survey of Production combines in one publication the net values of production for all commodity-producing industry groups for Canada and for each of the ten provinces.

In the Research Projects Section, the data on family and individual incomes obtained from the survey of 7,750 non-farm families in March and April, 1958, has been tabulated and analysed and is being published in *Distribution of Non-Farm Incomes in Canada, by Size, 1957*. During the past year plans were made for another sample survey to be undertaken in May 1959, to collect information on the liquid assets, indebtedness, and incomes of non-farm families. The 1959 survey is the second survey of this type; the first one was taken in 1956.

Consideration is being given to developing ways and means of providing estimates of personal and corporate saving derived from an analysis of financial transactions. When satisfactory estimates can be developed, the estimates of saving and capital formation published in the National Income and Expenditure Accounts will be supplemented by information on the way in which funds are transferred from one sector of the economy to another through the capital market. To facilitate this work an Interdepartmental Committee on Financial Statistics was formed.

A new project was begun during the year aimed at developing estimates of the stock of fixed capital (machinery and equipment, residential and non-residential structures) in Canada. Estimates are available from the National Income Accounts of the quarterly gross additions to the capital stock, but there have been no official estimates of the total stock to which these additions are being made.

Exploratory work continued on the possibility of integrating the various industry and commodity statistics into a consistent framework such as that provided by the table of the inter-industry flow of goods and services which was constructed for 1949. A member of the section sat on the General Committee on Industrial Classification which has been engaged in revising the DBS *Standard Industrial Classification*; another member worked closely with the Consultant on Classifications in preparing the DBS *Standard Commodity Classification* for use throughout the Dominion Bureau of Statistics.

SPECIAL SURVEYS DIVISION

This division is made up of three principal sections—an Operation Section, a Sampling and Analysis Section and a Field Administration Section. It co-operates with the other divisions of the Dominion Bureau of

Statistics, and with federal departments, to secure, by sampling methods, specialized information about Canadian businesses and population. The gathering of information by sampling methods is comparatively inexpensive and provides a great deal of material quickly. The division, through its eight Regional Offices, carries out the field work of the Dominion Bureau of Statistics. Through these offices, and using the services of a large number of temporary enumerators across the country, the division executes personal interview surveys in the course of which information on a variety of subjects is obtained from a cross-section of Canadian households.

Because the division specializes in sampling work it constantly co-operates with the other divisions of the Dominion Bureau of Statistics and other government departments to provide them with advice and assistance in obtaining data by these techniques. Over the period from November 1958 to February 1959 the Regional Offices carried out a survey designed to obtain statistics on farm business income and expenses, and also farm family living expenditures. Such material is of great use to marketing groups, farm associations, government administrators and others dealing with rural problems and conditions. To carry out the work a number of Department of Agriculture officers worked closely with DBS officials during the periods of training of enumerators, and actual enumeration.

The questionnaires themselves were necessarily quite detailed and interviews with farmers usually required some hours to complete the questionnaire properly. The response from the farmers interviewed was highly gratifying and this can probably be attributed to the fact that the field supervisors and enumerators selected were largely farmers or farm housewives who had first-hand knowledge of farm matters.

In close collaboration with the Central Mortgage and Housing Corporation, an improved sample was designed to reflect more accurately construction of new dwellings in areas outside of urban centres of 5,000 population and over. For this survey, reports on housing starts and completions are obtained through the field organization of the Central Mortgage and Housing Corporation.

To gain the maximum benefits from sampling techniques, continuous work is needed to improve the quality of samples and to keep abreast of changes in the field. Improvements in the design of the labour force sample illustrates this activity. Here changes were made by introducing a new rotation method in the larger urban centres and by establishing cities with populations exceeding 15,000 as self-representing areas. Considerable effort went into estimation of sampling variance. Special samples were selected for a Consumer Finance Survey and for an enlarged rent survey in certain metropolitan areas.

Research covered studies of under-enumeration in the 1956 Census and, in the Labour Force Surveys, the effect of repetitive interviews and the use of city directories to improve the accuracy of field listings. Studies of gross movement in the labour force, inaugurated during the year, appear to provide useful information in this area.

*Presented to the House of Commons
by the Minister of Finance
1960/61*



DOMINION BUREAU OF STATISTICS

For the Fiscal Year ended March 31, 1960

*Annual
Report*

DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS

CATALOGUE No.

11-201

ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1960



CANADA

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1960

*To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1960.

Respectfully submitted,

A handwritten signature in dark ink, reading "Gordon Churchill". The signature is fluid and cursive, with the first name "Gordon" and the last name "Churchill" clearly distinguishable.

Minister of Trade and Commerce

Ottawa, Canada
August, 1960

REPORT OF THE DOMINION STATISTICIAN

*THE HONOURABLE GORDON CHURCHILL,
MINISTER OF TRADE AND COMMERCE,
OTTAWA.*

Sir,—Developments in the Dominion Bureau of Statistics during the year 1959-60 reflected continuation, and in some cases the culmination, of the basic pressures which have been evident for some years. These pressures come from business users who need more and better facts for important business decisions. They come from the general public and government which require statistics as a guide to broad economic and social policy. They take the form of pressures to improve statistical procedures within DBS. In addition, the year saw intensified preparations for the decennial census to be taken in 1961.

In the area of business statistics, following the detailed surveys of industrial activities in 1958, designed to provide important bench-mark statistics, there was a return to a more simplified survey for 1959, intended to yield adequate data with a minimum burden on respondents. A major reorganization of editing and tabulation procedures was initiated in the industry and merchandising division, expected to be completed in the next fiscal year, and is intended to free subject matter specialists to maintain closer relations with business. Urgent needs called for expanded scope of statistics in transportation and communication; major improvements were made in statistics of road transport, aviation and shipping. New series were inaugurated on the transport and distribution of natural gas; surveys of the radio and television industry were resumed after having been interrupted for some years.

Public concern with problems of crime and delinquency and the needs of the authorities responsible for the administration of justice led to an enlargement of the programme for judicial statistics which is still in its initial stages. During the past year the emphasis fell on devising systems of reporting, an essential first step in the preparation of meaningful statistics. The inauguration of national health insurance made it necessary to introduce new reporting documents for hospitals. The new forms provide much more information than those used prior to 1959. Additional information on scientific research was obtained by an expanded survey which now includes Federal Government research-development expenditures. Similarly, the existing survey of trustee pension plans was extended to cover certain non-financial features of other kinds of pension plans.

Numerous measures were introduced to improve internal efficiency. A major example has been the programming and other preparatory measures, looking to the installation of an electronic computer in the summer of 1960, some six months earlier than originally anticipated. Programming was begun by the newly assembled staff and by the end of the fiscal year substantial progress had been made on computer programmes for the 1961 Census and the

1958 survey of farm income and expenditure. An important contribution towards better internal organization occurred with the filling of the new position of Organization and Classification Officer and the obtaining of a position for a full-time Training Officer. Consistent and significant classification of data collected about industries and commodities is at the foundation of useful statistics, and the work carried on over the years by our Consultant on Classifications is about to be implemented in two important directions: in the substitution of a modern and meaningful classification of exports and imports and in the consistent classification, in all DBS Divisions, of business firms. These measures, when carried out, will be of the greatest help to users of DBS statistics who wish to compare DBS series in the course of business and general economic investigations.

Under direction of the inter-divisional Census Committee, preparations were pushed forward for the 1961 Census, with full-scale census tests in June 1959 followed by development of final questionnaires in the latter part of the fiscal year. Administrative plans for the census were well advanced.

The Bureau continued to work closely with government agencies and other suppliers and users of data and to maintain liaison with international agencies. Trainees under technical assistance programmes spent extended periods studying the work of the organization during the year. In the summer of 1959 DBS was host to the International Co-operation Administration Training Group at a two-week conference.

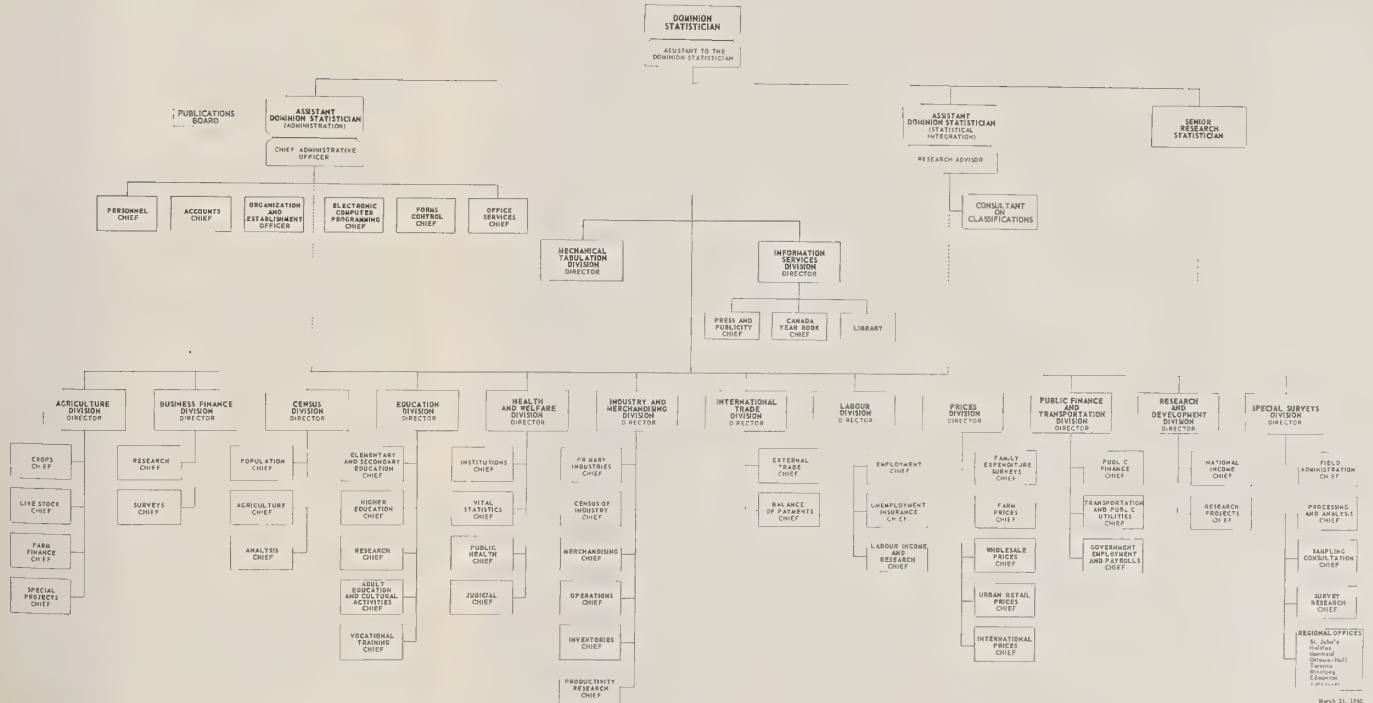
The following report describes briefly the structure of the various divisions and the way in which they meet the growing needs of the Canadian community for detailed and accurate information on Canadian social and economic life. The accomplishments of the past year reflect the effectiveness with which the individual members of the staff performed their day-to-day duties.

Walter E. Duffett

Ottawa, Canada
August, 1960

Dominion Statistician.

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION



DOMINION BUREAU OF STATISTICS

Chart showing organization

March 31, 1960

GENERAL ADMINISTRATION

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general policy matters, mathematical and sampling services, personnel, stenographic and office services.

During the year increased attention was given to widening the knowledge and use of sampling in DBS divisions, under the direction of the Senior Research Statistician, who is the senior mathematical officer of the Bureau. During the year the incumbent of the position, Mr. Nathan Keyfitz, resigned to accept a position of Professor of Political Economy in the University of Toronto. His successor is actively pursuing this project.

The work on classification systems, of basic importance to a properly integrated statistical system, and particularly adapted to a centralized statistical agency such as DBS, continued during the year and occupied much of the time of senior officers, especially in the Administration, the Industry and Merchandising, International Trade, Business Finance and Labour Divisions. During the next three years a series of major projects in this field are expected to be carried out and will be of great help to users of DBS material in developing consistency in many DBS series, which now cannot readily be used together.

To prepare for the installation of the Electronic Data Processing System and the Document-to-Tape Reader selected in 1958-59, a programming staff was organized. The function of this staff is to prepare programmes for the computer, that is, to analyse applications and set out instructions the computer must execute in processing data. The programming staff, when at full strength, will consist of 22 persons, of whom 17 have already been appointed.

The programming section has concerned itself chiefly with the preparation of programmes for processing the farm income and expenditure survey, the 1961 decennial census, and some of the regular statistical series for the Bureau. Of programmes so far projected for the farm income and expenditure survey, 34 were written. Twenty-one programmes for the 1961 census of agriculture and 48 for the 1961 census of population were also written. Tentative plans for programming the census of housing were well advanced with programming to commence early in 1960. Programme testing was conducted in a limited way on the computer at the Air Materiel Command of the R.C.A.F. Testing will be accelerated considerably with the installation of computer at DBS in July or August of 1960.

Two important additions were made to the staff establishment during the year. The first was the creation of a position, which will be staffed ultimately at the level of the present Assistant Dominion Statisticians, and which will assist in ensuring continuing close liaison between the Administration and the DBS divisions. This position is now occupied by the former director of the Prices Division, who has a broad background of experience in DBS activities. The second position is that of Establishment and Organization Officer whose duties are to work towards the creation of appropriate and consistent classifications of DBS staff, and in the course of this work, to

study and advise on organizational matters. This officer works closely with the staff of the Civil Service Commission. A further position, that of a Training Officer, was provided during the year, but has not yet been staffed.

The Forms Control Section, established some years ago to assist in this simplification of paper work, contributed during the year to the revision in the methods of collecting and distributing DBS statistics. The Section also provided studies of office lay-out made necessary by the addition to the building and the installation of the electronic computer.

At the close of the fiscal year the regular staff numbered 1679, an increase of 31 from the same period a year earlier. During the year 298 persons were recruited and 267 persons separated. The number of positions for economists and statisticians in 1959-60 was 241, an increase of 26 from the previous year; 32 economists or statisticians were recruited and 20 were separated from the staff. In addition to the regular staff, 18 research students were employed during the summer of 1959.

AGRICULTURE DIVISION

Responsibility for agricultural statistics is divided among the Department of Agriculture, the Board of Grain Commissioners and the Dominion Bureau of Statistics. Within DBS, the major share of responsibility rests on the Agriculture Division which maintains a continuing review of statistical requirements in agriculture, collects data from farmers and others and reports on production, utilization, stocks and prices of farm products and on the gross and net income of farmers from farming operations. The Census Division collects data on the structure of agriculture, and other Divisions data on prices and uses of farm products. Data on commercial marketings of a variety of farm products become available in the course of the regular work of the Board of Grain Commissioners and the Department of Agriculture.

The Agriculture Division collects data mainly at the farm level by sample surveys conducted by mail. However, full coverage is used in the case of some plants manufacturing farm products, such as flour mills and dairies.

A Dominion Government Inter-departmental Committee and an annual Dominion-Provincial Conference on Agricultural Statistics co-ordinate the work of the agencies concerned with statistics in this area. The last Dominion-Provincial Conference was chiefly concerned with discussing new methods of collecting data on agriculture in the United States.

The Agriculture Division at Headquarters consists of four sections: Crops, Livestock, Farm Finance and Special Projects.

The Crops Section's output is geared to collecting, as quickly as possible, information for assessing the situation in the many agricultural commodity markets. To this end, data on some 21 field crops are obtained by mailed questionnaires from a large number of volunteer correspondents across Canada. Surveys are made and reports issued on a wide variety of specialized

crops and on operations of flour mills and oilseed crushing plants. Publications based on data from secondary sources are also issued, among them being *Grain Trade of Canada* and the *Wheat Review*.

During the fiscal year the Section conducted two extra surveys on the progress of harvesting in the Prairie Provinces; these surveys were necessary because early snow falls had disrupted harvesting in that region. At the request of the Research Laboratory of the Board of Grain Commissioners, the Section greatly expanded the scope of its work in estimating the protein content of the Prairie wheat crop; this project, which will likely be put on a permanent basis, was completed during the year. A new questionnaire covering losses due to pests was developed in conjunction with the Alberta Department of Agriculture. The *Handbook of Agricultural Statistics, Field Crops, Part I* was revised and re-issued during the year.

A study of the insurance risks of crop production was initiated; this study, which is still in progress, was based on data from the summerfallow-stubble survey in the Prairie Provinces. The use of aerial photography as a means of identifying individual crops was the subject of another new study; tentative arrangements were made to conduct an experimental aerial survey in the Prairies in the summer of 1960. Still another project was concerned with techniques of measuring apple production.

The Livestock Section, in addition to the preparation of regular reports, was engaged in a new study of the usefulness of survey data in forecasting hog production. In order to improve the usefulness of statistics of stocks of poultry to the trade and to marketing boards, reports were altered to include a wider range of classifications.

The Farm Finance Section is responsible for the semi-annual survey of crops and livestock and for reports on cash and net farm income, on the volume and value of farm production, on prices at the farm, and wage rates paid by farmers. With some re-arrangement of the work the estimate of acreage of field crops was brought forward two weeks. In an effort to improve the quality of information on farm prices, the Section increased the number of correspondents and revised the hitherto uniform questionnaire so as to provide for special questionnaires for provinces or groups of provinces. The existing discrepancies between agricultural prices reported by farmers and prices reported on terminal markets was investigated; a larger number of cooperative marketing organizations agreed to provide the Bureau with monthly reports on net prices received by farmers who sold through these agencies; these reports will serve as a check on the existing farm price series.

In connection with the quarterly estimates of farm net income, which are incorporated in the National Accounts, the quarterly estimates of changes in farm stocks of grain were revised. For the first time an advance preliminary estimate of farm net income was prepared and published early in 1960.

The Special Projects Section was occupied during the year with processing the 1958 Survey of Farm Income and Expenditure. This survey was designed to provide (1) estimates of farm business expenditure from farming for use as bench-marks in statistics of farm finance, (2) the distribution of expenditure among commodities and services used by farm families for use

as weights in index numbers of prices paid by farmers; (3) estimates of income received by farm families from sources other than the farm; (4) the distribution of income among farm families, by size and source of income.

The results of this survey are being tabulated by electronic computer. Effective use of this method requires elaborate preparation with a view to present and future needs. The major part of this preparatory work was completed during the year.

BUSINESS FINANCE DIVISION

The main functions of the Division are to provide data on current and prospective capital expenditure in Canada, information on research and development expenditures, estimates of construction activity, estimates of profits and other information on corporate activities and data on pension plans. The Division also co-ordinates the work of keeping up-to-date a list of new establishments.

The report *Private and Public Investment, Outlook 1960* was released late in the fiscal year. During the course of the year an historical series covering the period from the inception of the report in 1946 to 1957 was prepared and published. These estimates cover the capital spending intentions of business, institutions, governments, and individuals for housing. The capital investment intentions report is a key statistic for assessing future trends in the economy and is widely used as a basis of decision-making in government and the business community. Capital expenditures account for a large part of national production and the size and content of the programme is a valuable indicator of the demands likely to be placed on the economy in accomplishing it.

The Division co-operates closely with the Central Mortgage and Housing Corporation in the preparation of construction statistics. During 1959 it was decided that development and improvement of statistics of residential construction was essential and a new position was established to this end. The Division agreed to assume responsibility for preparing estimates of residential construction for incorporation in the National Accounts; these estimates have hitherto been prepared by the Central Mortgage and Housing Corporation.

A report *Construction in Canada, 1957-59* was released during the year. The regular monthly report *Building Permits* continued to provide data on building activity in over 1,000 municipalities.

In recent years there has been growing public awareness of the importance of research. Accordingly, DBS in co-operation with the National Research Council inaugurated a survey to determine the magnitude and direction of research-development activity in Canadian industry. Preparatory work for the third biennial survey *Industrial Research-Development Expenditures in Canada*, covering the year 1959, was completed by the end of the fiscal year. A parallel survey, covering the research-development activities of Federal Government departments and agencies, was inaugurated during the year and the results are to be released shortly.

The regular quarterly reports on corporate profits and related data were published. In co-operation with the Research and Development Division, a seasonal adjustment of the corporate profits series was included for the first time in the fourth quarter 1959 report and the seasonally adjusted series were made available for earlier years, beginning with 1955.

At present, no current statistics are available on changes in corporate liquidity. These changes have a marked effect on the economy and are therefore of interest to decision-makers in government and business. Up-to-date information on changes in assets and liabilities in the corporate sector would also be a step towards making it possible to prepare separate source and disposition of saving accounts for each sector of the economy. In an effort to determine the feasibility of obtaining data on assets, liabilities and net worth from corporations, a pilot survey was undertaken during the year.

The Division prepared the regular monthly or quarterly series of cheques cashed and commercial failures which were transferred to it from the Research and Development Division during the year; these two economic indicators are of special interest to the financial community. It also completed, for the use of the Central Mortgage and Housing Corporation, a survey of mortgages and agreements of sale held in estates, trusts and agencies.

The growing importance of pension plans as a medium of personal saving emphasizes the need for statistics in this area. The report *Trusted Pension Plans, Financial Statistics, 1958* was published during the year; this is the second report in what is intended to be an annual series. The report provides data on income and expenditure, on the distribution of assets and on that portion of the assets deposited with trust companies which is invested in pooled funds on behalf of the smaller employers. The work on pensions was extended toward the end of the year when preparations were made to collect data on selected operations of all types of pension plans; this information is of interest to those concerned with the problems of financing retirement and old age.

The Division continued to keep up-to-date and publish twice annually the *Survey of New Establishments*; names, addresses and principal products manufactured were provided for approximately 4,000 new establishments. This centralized body of information is used by the Bureau of Statistics and other government departments to keep mailing lists current and by business organizations wishing to keep informed of new entrants in particular industries and areas.

Work on constructing a standard list of establishments for use by all Divisions of the Bureau, initiated in the previous year, continued; the major part of the work during the year consisted of matching the lists maintained in the Labour and Industry and Merchandising Divisions. It is hoped that at least the manufacturing section of the standard list will be completed by the end of 1960. The list, when completed, will facilitate direct comparability of the main series of industrial statistics and standardize the application of the Revised Industrial Classification.

CENSUS DIVISION

In the line with the principal function of the Census Division, the planning and taking of the Census, the activities of the staff of this Division during the past twelve months have been centered around the Census test taken in June, 1959 in Joliette, Quebec and Galt, Ontario and surrounding rural areas. This included the preparation of questionnaires for Agriculture, Population, Housing, Forestry, and Merchandising, as well as the administrative forms required in connection therewith, in addition to the manuals of instruction for the field staff. Instructions for the editing and coding of the documents completed in the test and the programmes of tabulations were also prepared.

In order to examine at first hand the various steps in the enumeration, observers from the several Census Committees within DBS were sent to the test areas to observe the training of the commissioners, the training of enumerators, and the enumeration itself. Observers also followed the postal check procedure, which was one of the innovations included in the Census test. Briefly, this procedure involved the co-operation of the Post Office Department in having their letter carriers check the addresses of dwellings enumerated in the test, to determine whether any were missed by the enumerators.

Following the field enumeration, considerable time was spent in analyzing the results of the test, including the individual reports of the observers. The test was most valuable in formulating the final plans for the 1961 Census, from the standpoint of training the field staff, problems relating to the enumeration of the questions themselves, and relating to the editing, coding, and the tabulation.

Following these analyses, questionnaires were prepared for recommendation for the 1961 Census enumeration. Cabinet approval of the individual questions for the Population, Housing, Agriculture, Merchandising, Forestry, Irrigation, and small Agricultural Holdings, was received at the close of the fiscal year. Arrangements are being made to print the various forms and documents.

Based upon the experiences of previous censuses, and of the analysis from the time records kept for the test, a submission was prepared covering the rates of remuneration and allowances to be paid the field staff, commissioners and enumerators.

During the period, negotiations were continued with other Government departments concerning the enumeration in the northern areas of Canada, of persons living on Indian Reserves and of military establishments.

The preparation of the individual enumeration area maps for the Census was continued. The sub-division of the Electoral Districts into Commissioners' Districts was commenced and forwarded to the Regional Statistics Officers for review. Arrangements were completed for the establishment of census tract areas in a number of centres, and revisions were made in former boundaries of the census tracts and other urban centres.

In the Administration Section, some 43,000 applications for verification of age using early Census records and National Registration Records were received and processed during the year.

In the Analysis Section, the regular series of estimates of population were prepared and published. Quarterly population estimates, by province, were prepared and published for the first time in 1959. The annual reports—*Estimates of Families in Canada, 1958* and *Canadian Citizenship Statistics, 1958* and a special report *Characteristics of Persons Granted Canadian Citizenship, 1953-58*, were prepared and published. Three Analytical Reports from 1956 data, covering *Farm Mechanization, Field Crops and Livestock*, and *Size and Composition of Households*, were prepared in collaboration with officers of the Agriculture and Population Sections, and released during the year.

The Director of the Census and a number of the Census Officers participated in various phases of the U.S. 1960 Census of Population, Housing, and Agriculture. Committee reports, technical papers, and other Census material were exchanged. The Chief of the Agriculture Section attended the Canadian Agriculture Institute Workshop at Kenora, Ontario.

Officers of the Division assisted in the training of International Co-operation Administration and United Nations observers studying Census methods in Canada.

EDUCATION DIVISION

Rapidly increasing enrolments from primary grades through university and insistent demands for more accommodation, and more qualified teachers, combined with rapidly rising costs, have greatly increased the demand for additional series and for more timely statistics. In response to these needs, the Education Division published more reports than in any previous year and considerably reduced the time-lag between events and reporting.

In order to meet the demand for current statistics, the first preliminary report, containing as many statistics as possible and some estimates, was prepared for release in May.

The principal data collected and analyzed by the Division cover number and type of institutions, numbers, salaries and qualifications of staff; numbers, schools and activities of those enrolled; and revenues and expenditures. To co-ordinate provincial statistics so as to provide comparable data for the nation is a prime function of the Division. The work is organized in five sections: Elementary and Secondary Education; Higher Education; Vocational Education; Adult Education, Museums and Libraries; and Research and Development.

In the course of these activities the Division maintains close liaison with provincial governments, Federal Departments and agencies and a large number of private organizations, including the Canadian Education Association, the National Conference of Canadian Universities and Colleges, the National Vocational Training Advisory Council, The Canadian Association for Adult Education, and the Canadian Library Association; it works with UNESCO as well as with educational organizations in the United States.

A Dominion-Provincial conference on statistics of elementary and secondary education was held in May 1959. Emphasis was on timeliness, uniformity in reporting and completeness of coverage. As a result of this conference, it was arranged to collect much of the data at the beginning rather than the end of the school year so that figures can be made available during the year. The Survey on Elementary and Secondary Education, at present biennial, will become annual with the 1958-59 report.

Another Dominion-Provincial conference is anticipated in the autumn of 1960 dealing exclusively with school finance. A major objective of this conference is to reduce the present two-year time-lag in the publication of these statistics.

The Higher Education Section is expanding the scope of its work and improving the timeliness of its statistics. A report on higher education for the years 1954-59, to be ready for release by the fall, will be followed by annual surveys. A special report on salaries of teachers in universities and colleges for the period 1937-38 to 1959-60 is nearing publication. Reports on enrolment in the fall of 1959 and salaries and qualifications of teachers for 1958-59 were published during the year.

There is keen public interest in scholarships and other awards and on school drop-outs. The report *University Entrance Awards, 1960* and the 1960 supplement to *Awards for Graduate Study and Research* were completed during the year. A new report *Student Progress through the Schools, by Grade, 1960* is nearing completion.

The first annual survey on the larger public and university libraries was issued during the year and plans were made for enlarging the scope of future surveys.

The first annual survey of adult education will be issued in 1960. The series on vocational education have been established and will be developed in regular publications beginning in 1960.

The Division continued to receive a great number of requests for compilations, articles, papers and talks. These requests were met insofar as time permitted.

HEALTH AND WELFARE DIVISION

This Division publishes statistics of births, mortality, illness, health care, law enforcement, and the administration of justice. The work involves co-operation with departments and agencies of the Federal Government, provincial government, international agencies and a variety of private organizations concerned with problems of health and welfare, crime and punishment. The Division is divided into four sections: Public Health, Vital Statistics, Institutional Statistics and Judicial Statistics.

In addition to its regular reports, the Public Health Section prepared a number of special reports, among them being the main report on the 1950-51 Sickness Survey. A number of subsidiary reports based on the Sickness Survey are under preparation on such subjects as illness, health care and the characteristics of the families in the Survey.

By securing data more promptly from the provinces and stream-lining procedures at DBS, improvements were made in the timeliness of reports published by the Vital Statistics Section. In order to obviate the need to prepare so many special tabulations, the regular reports were expanded and supplemented by regular reports on specific matters of wide public interest, such as deaths from cancer. The section collaborated with the Atomic Energy of Canada in a study of the genetic effects of atomic radiation.

The Vital Statistics Section has acted as the Secretariat of the Vital Statistics Council since it was established by Dominion-Provincial agreement in 1945. The Council, in collaboration with the Section, is currently reviewing the complete series of vital statistics indexes and related matters.

The introduction of national health insurance has made it necessary to expand the scope of the hospital statistics collected and published by the Institutions Section. New reporting documents for collecting 1959 data were introduced, which provide about 50 per cent more information and permit new and valuable comparisons to be drawn. The regular reports on hospitals for the tuberculous and mentally ill were supplemented by a more comprehensive report than has hitherto been available on the characteristics of the patients in these institutions.

The Judicial Section is engaged in a developmental programme in the field of statistics of crime and correction. The police statistics project, initiated in 1958, was continued in 1959, with a study of police reporting methods in Canada and several other countries in order to determine what kinds of information are useful. The objective of this project is to design a uniform system of records for the use of Canadian police departments. Other projects under way are concerned with statistics of training schools, correctional institutions for adults, and parole statistics. A programme was initiated to develop a uniform reporting system for describing statistically at every stage the movement of persons through the law enforcement and judicial process from the time of arrest or summons. The section works closely with a variety of organizations, such as the Canadian Association of Chiefs of Police and the National Parole Board.

INDUSTRY AND MERCHANDISING DIVISION

The Division provides a wide range of statistics on the commodity-producing industries and on the distributive trades. It carries out an annual Census of Industry covering manufacturing, mining, logging and fishing, as well as a decennial Census of Merchandising, which comprises retailing, wholesaling and the service trades. Current data are provided monthly or quarterly on production and stocks of important commodities, on values of

manufacturers' shipments, inventories, and orders, and on retail sales, wholesale sales and consumer credit. Special studies are conducted from time to time on other aspects of industry and merchandising. These statistics are widely used by government departments in making policy and administrative decisions, and by industry in keeping informed on business trends, in appraising markets, in determining operating levels, in planning capital expenditures and so on. They are also essential to DBS for assembly into important statistical aggregates such as the Gross National Product and the index of the physical volume of output.

So as to provide new bench-mark data, the 1958 Industrial Census was more complete than for any other year during the past decade as all establishments, small as well as large, were required to report data on employment, payrolls, materials and fuels, inventories and shipments. This contrasts with policy for the years 1949 to 1957 inclusive, which permitted approximately 15,000 small manufacturing establishments to report on a 'short' form asking usually for gross value of shipments only, estimates for the other data being prepared in the Division on the ratio of shipments in the survey year to shipments in 1948, the last base year.

For the industrial census for 1959, a return to the 'short' form was made, thus permitting establishments with gross values of shipments under \$100,000 to report only total value of shipments plus output data for a few major products. To reduce further the reporting burden on respondents, an 'intermediate' type form was introduced for plants with output valued at more than \$100,000 annually but less than \$500,000. It asks for all principal establishment statistics (number of employees, payroll, cost of materials and fuels, value of shipments, value of inventories) but omits certain breakdowns under these headings. For 1959, about 20,000 plants will report on the 'short' form, 7,000 on the 'intermediate' form and 11,000 on the standard long form. The latter group account for about 94 per cent of the value of shipments by all manufacturing establishments.

The Census of Industry is expected to change to the new Standard Industrial Classification for the 1960 compilations. Plans are being made to compile the principal establishment statistics for 1959 on both the old and the new classifications to provide a link between the two series. The new Standard Commodity Classification is being introduced gradually in the Census of Industry, implementation to be complete for 1961 data.

Research on productivity has continued on a modest scale. The small staff available for this project has been devoted almost exclusively to the compilation of man-hours data for 1956 and 1957, the first two years for which man-hours were reported to the Census of Industry.

Improvement in coverage and quality has been achieved in the monthly data on manufacturers' shipments, inventories and orders, and in the monthly series on sales and inventories of manufacturers' trading outlets which carry stocks.

A new approach to wholesaling statistics is under study. Since the universe is not large, it is thought that more attention should be given to annual statistics and less to the decennial census. With this possibility in mind, a survey of wholesale establishments, using unemployment insurance records for

enumeration lists, was undertaken for the year 1958. Results will be published about mid-1960. Experience with this survey will assist in streamlining the decennial census of wholesaling, to be taken in 1961 and in determining policy after that date.

Subscribers to the series of biennial publications on wholesalers' operating results were circularized as to the usefulness of the statistics. Replies indicated the need for substantial changes and it was decided to suspend these surveys pending further study.

Revised estimates of the value of wholesalers' inventories in twelve trades were prepared and published in the December 1959 issue of *Wholesale Trade*.

Shuttle-type schedules were introduced in the monthly sample surveys of wholesale and retail trade.

The annual sample survey on retail trade was extended to include data on gross profits and on retail credit, thus providing gross profit ratios for the same class of stores for which sales estimates are made. For some purposes this is an improvement over the ratios prepared from the biennial operating results which are confined to 'pure' stores in selected trades, i.e. stores which are fairly homogeneous in their activities. Ratios are now available for motor vehicle dealers, lumber and building supplies dealers, etc. which have never been included in the specialized operating results studies.

Beginning with the January 1960 issue of *Retail Trade*, separate sales figures were published for each of the Atlantic Provinces. Formerly only combined figures were shown.

Two new fields of consumer credit were explored to assess their contribution to total consumer indebtedness. It was found that travel agencies usually transfer contracts to the customer's bank or to finance companies, so credit granted for travel is in most cases already included in available financial statistics and need not be collected separately. It was ascertained also that the major gas and electric utilities companies can provide annual data on the amount of credit owing from conversion of household heating units or from installation of other major appliances. This information will be collected annually in future.

Beginning with April 1959, data on landings of fish in the Maritime Provinces, made available from purchase slips, have been put on IBM punch cards. Compilations of landings are prepared in Halifax, after which the cards are forwarded to Ottawa for special tabulations for the Department of Fisheries, the Department of Public Works, and for the Fisheries Research Board.

The Division continued to co-operate with the Forestry Branch, Department of Northern Affairs and National Resources and with the province of New Brunswick in experimental sample surveys designed to provide data on the cut of forest products from private lands. Two forest districts were covered in 1959, and it is hoped to extend operations to cover all five districts in 1960. A similar test survey was carried out in the Tweed district in Ontario in 1959 in co-operation with provincial forestry authorities.

On the recommendation of the industry the coverage of the monthly statistics on meat and meat products was altered to refer to domestic disappearance of products rather than to gross shipments. Shipments for the Agriculture Stabilization Board are not now included, nor are shipments for export.

The annual survey on women's factory clothing has been extended to include a breakdown by price ranges of manufacturers' shipments of dresses, blouses and regular coats. The quarterly statistics on men's and youth's clothing now provide a breakdown of all-wool suits between "made to measure" and "ready made."

INFORMATION SERVICES DIVISION

This Division acts as a centre for disseminating the published information of the Dominion Bureau of Statistics. To this end, it compiles and publishes the *Canada Year Book*, the handbook *Canada* and the DBS *Daily and Weekly Bulletins*, answers general enquiries, and maintains a suitably stocked library for research and study.

The Canada Year Book Section is responsible for the publication of the *Canada Yearbook*, the official compendium of information on the country's economic and social development, and the illustrated official handbook *Canada*. The handbook *Canada* 1959 was released in August of 1959 and the *Canada Year Book* 1959 the following December. By the end of the fiscal year preparations for the 1960 editions of these two publications were well advanced. During the year, the Section undertook the editing of the French editions. This relieved the Translation Section of the responsibility and should reduce the time-lag between the English and French editions.

It is the aim of the Press and Publicity Section to obtain the most effective distribution of DBS material. It prepares the *Daily and Weekly Bulletins*, which in addition to providing a summary of publications as they are released, summarizes reports and statistics not published elsewhere; it replies to a great number of enquiries, prepares the annual *Catalogue of Current Publications*, and publicizes the services provided by DBS in a variety of ways.

The Library maintains a large stock of books, periodicals, documents and reports for the use of the staff and research workers. The Bureau obtains some of the material for the Library on an exchange basis and during the year a mutually advantageous arrangement was entered into with the Library of Congress in the United States. Steps were taken to fill in gaps in the Bureau's holdings of periodicals. Further progress was made on the historical checklist; it is hoped that this work will be completed in 1960 so that publication of the historical catalogue will coincide with the *Historical Abstract of Canadian Statistics* now being compiled by the Canadian Political Science Association.

INTERNATIONAL TRADE DIVISION

The division provides statistical information covering a wide range of economic and financial transactions between Canada and other countries. It is composed of two main sections, one dealing with external commodity trade and the other with balance of payments, investment position and international travel. The statistics are in demand by a broad group of users in both the business world and governments, being used for a great variety of purposes, including economic and financial analysis, market studies, and commercial relations.

The uses to which external trade statistics are put demands that they be published promptly and in considerable detail by commodity and country. Export statistics were published as promptly as is economically feasible throughout the fiscal year 1959-60, on the basis of a production schedule which provided for the release of the main monthly export report about five weeks after the close of the month to which it related. However, the release dates of import monthly reports remained highly unsatisfactory, varying from twelve to sixteen weeks after the close of the month to which they related, rather than with the approximately nine weeks' lag which is economically feasible.

A new classification of countries for external trade statistics was developed during the year and implemented in January, 1960. The new classification was designed to provide greater flexibility of operations and greater ease of training staff as well as more up-to-date and usable country information in the trade reports. A great deal of valuable assistance was received from the Trade Commissioner Service in the revision of this classification.

Several adjustments were also made in the coverage of export and import statistics as of January 1, 1960. These were designed to bring the coverage of these two series more closely in line with one another and with the adjusted trade totals used in balance of payments calculations, and to move towards the standards of coverage recommended by the United Nations Statistical Commission. The principal adjustments were the deletion from imports of movements of goods to supply foreign diplomats and armed forces in Canada (already excluded from exports), tourist purchases (already largely excluded from exports), and settlers' effects and private donations and gifts (also deleted from exports).

Considerable progress was also made towards the implementation of the Standard Commodity Classification in export and import statistics. A draft working classification, with rulings, was completed and tested for exports, and a first draft working classification prepared for imports. Because the professional staff of the External Trade Section is not adequate to carry this developmental load, it was necessary to augment it temporarily with the co-operation of the Agriculture and Industry and Merchandising Divisions, though at some cost in terms of development in their fields.

Present plans are to introduce the new commodity classification for export statistics in January, 1961, and for import statistics in January, 1962. The introduction of completely new classifications will require the re-training of most of the clerical and technical staff of the External Trade Section, and in the initial months of work with the new classifications the work speed of individual clerks will be sharply reduced. In order to minimize interruptions in the release of trade statistics, it is planned to hire a large number of temporary clerks to provide assistance in this period, and also to obtain further assistance through overtime work. In this way the timeliness of trade statistics should be substantially restored by the end of the first year that the new classifications are in use. The Standard Commodity Classification is expected to provide a sufficiently flexible framework for trade statistics to serve for several decades.

One of the more difficult problems in balance of payments methodology is the measurement of short-term movements of capital. Recent developments in North America have given increased importance to such movements. The growing interest in the developing money market, and to a lesser extent in the foreign exchange market, have emphasized the need for more data. During the year a reference paper of background information on Canada's short-term external assets and liabilities was published, and further developmental work was undertaken to extend basic Canadian banking statistics of international short-term movements of capital.

Resources in the Balance of Payments Section continue to be strained. However, the introduction of a triennial survey procedure to cover less active or less important companies heretofore covered annually by the Section, together with greater stability of staff, enabled the current work of the Section to be carried on despite a continuing increase in the volume of transactions covered in the balance of payments. Qualitative improvements were made in some aspects of the work and a regular survey of holdings of Canadian securities by United States insurance companies was extended in coverage. It is hoped to reduce somewhat the time-lag involved in the production of the annual report on the Canadian Balance of International Payments. Meanwhile quarterly reports on that subject have continued to be issued on schedule.

In October, 1959 new procedures in dealing with the admission of non-resident automobiles to Canada were introduced by the Department of National Revenue for administrative reasons. These changes have had important statistical effects upon records of non-resident automobile movements into Canada and the estimates of expenditures in Canada of this group of non-residents which are a significant element in Canada's balance of Payments. A much larger volume of new simplified permits now have to be processed in producing these travel statistics, and new statistical procedures have had to be developed to deal with these transactions. While monthly publications covering this border traffic had to be temporarily withdrawn following the introduction of the change, resumption of the monthly publication is planned early in the year. It will, however, only be after a considerable lapse of time that full comparability in the statistics can be restored, as comparisons between new records of the volume of traffic and the former administrative record have been complicated by the administrative change.

LABOUR DIVISION

Development work in the Division during 1959-60 was directed mainly toward laying the groundwork for major operational changes which are to be introduced in the next few years. Broad plans were formulated for partial transfer of statistical processing operations to an electronic computer, and progress was made towards translating these plans into detailed proposals. The Division participated in working out arrangements for the preparation of a standard list of establishments to be used by all DBS units. This list is one aspect of the work involved in preparing for integration of establishment statistics. Labour series which should benefit particularly from this integration include the employment data prepared from payroll records of establishments. Preparations were also made for the adoption of a revised system of industrial classification, and for the use of the year 1961 as a new base period for the publication of index numbers.

The Division consists of three units: the Employment Section, the Unemployment Insurance Section, and a small central staff.

In the Employment Section, the usual monthly and annual reports were prepared and the number of respondents was increased by about 7 percent. This was a larger gain than in recent years, partly due to progress made in the first stages of a standard list of industrial establishments in DBS. Development of this list will contribute to better industrial coverage and should improve the accuracy of industry and local area statistics.

Recoding of establishments according to the revised Standard Industrial Classification was commenced late in the fiscal year. A newly-formulated definition of establishment is also expected to produce some changes in classification. Methods of providing historical data on the new basis received a good deal of consideration, since the value of improved statistics is greatly lessened if they cannot be used for historical comparisons.

Some progress was made during the year in planning the changes in work flows required to adapt the monthly statistics of employment, payrolls and man-hours to electronic computer processing. This will involve changes in the monthly questionnaires sent to respondents, as well as in the Section's operating procedures. The computer should result in a fuller exploitation of the monthly data furnished by industrial establishments, notably in the field of segregating statistics for salaried personnel, who are forming an increasing proportion of the labour force as industrial automation proceeds.

Further work was carried out during the year on seasonal adjustment of the monthly employment and average earnings series.

There is a steadily increasing interest in statistics of employment, earnings, and hours of work for wage and salary adjustment, market analysis, general economic analysis, plant location and industrial development, for cost accounting purposes and for use in cost escalation clauses in contracts for equipment whose manufacture extends over a lengthy period.

Work of the Unemployment Insurance Section was complicated by an amendment to the Unemployment Insurance Act in September 1959 extending the coverage of salaried employees from \$4,800 to \$5,460, adding two higher

contribution and benefit classes, and at the same time increasing the maximum benefit period from 36 to 52 weeks. Changes of this kind create problems in the maintenance of historical continuity of statistical data. Somewhat similar difficulties have resulted from the mechanization programme introduced earlier into the U.I.C. Prairie Region. In this case statistical tabulations are complicated by the different occupational codes used by U.I.C. and the Dominion Bureau of Statistics. First arrangements to handle the necessary translation from one type of card to another have been improved with the help of U.I.C. co-operation during the year.

A review of all special reports on National Employment Service statistics was carried out with N.E.S. officers having in mind improvement in design and economy of publication. The semi-annual Hirings and Separations report was also re-designed and printing costs reduced.

Primarily, unemployment insurance statistics serve the operational needs of the Unemployment Insurance Commission, the Actuary, and the Unemployment Insurance Advisory Committee. However, the operations of the Commission are of concern to all who are interested in the condition of the national economy. For example, annual records of the insured population provide a comprehensive record of the occupational and industrial distribution of a very large proportion of the wage-earning population. This information also furnishes unique material for studying the mobility of Canadian workers.

MECHANICAL TABULATION DIVISION

The subject-matter divisions gather data which form the basis for statistical tables. A large part of this material is processed by the Mechanical Tabulation Division, a service division, using a variety of mechanical equipment. A major addition to the present range of equipment will take place in mid-1960 when an electronic computer is to be installed.

The greatest part of the work is done on punch card equipment. About 40 p.c. of the staff record the data from the source documents onto punch cards; one group of operators punch the cards and a second group verify, independantly, the accuracy of the punching. Another 40 p.c. of the staff operate a variety of other punch card equipment, such as sorters and tabulators, to group the punch cards by characteristics of the data and to produce in printed form the totals required. The remainder of the staff operate comptometers and desk calculators to produce aggregates directly from data recorded on source documents.

A large part of the work of the division during the year involved monthly, quarterly and annual tabulations which are largely repetitive. However, a considerable number of requests for special tabulations were handled during the course of the year. As in the past, quite a number of projects were undertaken for other government departments and agencies on a cost reimbursement basis under individual agreements.

Tabulation services for the Immigration Branch, Department of Citizenship and Immigration, were continued. Considerable work was carried out for the Department of Labour, particularly in connection with surveys of wage rates and of members of scientific and technical professions. Atomic Energy of Canada Limited and DBS co-operated in studies of family linkage of vital and health records; the Division prepared the punch cards and tabulations required. The Division prepared tabulations which formed the basis for a number of tables in the Annual Report of the Department of Insurance. Punch cards and listings were prepared as input for a computer for the Telecommunications Establishment of the Defence Research Board.

The programme for tabulating statistics of the fishery on the East Coast was well established. At the request of the Department of Fisheries, a senior officer of the Division visited Vancouver to review the requirements and techniques used on the West Coast; recommendations were prepared and await implementation.

New and established procedures were kept under review. Following a successful pilot study, the punching of Vital Statistics directly from microfilm was extended, thus reducing substantially a lengthy clerical operation.

The plans for a Computer Centre in the Bureau resulted in a contract for the installation of a computer system and the Mechanical Tabulation Division will be responsible for its operation. The Programming Unit in the Bureau has been established and is preparing programmes for the 1961 Census and regular Bureau series for use on the computer. The Mechanical Tabulation Division has undertaken the preparation of punch cards for these programmes.

PRICES DIVISION

The function of the Division is to collect and publish data on prices and on urban consumer expenditure. It consists of five sections: Consumer Expenditure Surveys, Farm Prices, International Prices, Retail Prices, and Wholesale Prices.

While the prime purpose of consumer expenditure surveys is to provide a basis for revising the weights in the Consumer Price Index, the resultant body of material on expenditures of Canadian families is widely used by business organizations and welfare agencies.

The 1957 survey of consumer expenditure was the third in a series of biennial surveys and a fourth survey covering the year 1959 is to be taken early in the fiscal year 1960-61. During the fiscal year 1959-60 the analysis of the 1957 survey was brought close to completion; preliminary releases of the results were published in the DBS *Daily Bulletin*, consisting of summary tables from two forthcoming reference papers *Urban Family Food Expenditure, 1957* and *City Family Expenditure, 1957*.

The 1959 survey concentrates attention on expenditures for items other than food and is designed to mesh with the 1959 survey of non-farm income carried out by the Special Surveys Division in conjunction with the Labour

Force Survey in May 1959. Information was collected in both surveys to permit alternative tabulations according to the "family" definition used in the income survey and the "spending unit" definition used in the expenditure survey. The 1959 survey should be more useful than previous surveys in that it is less restricted in scope and is based on a larger sample.

In addition to indexes of prices of farm products and prices paid by farmers, the Farm Prices Section prepares and publishes indexes of prices of industrial materials, building materials and of common and preferred stocks. It also had several developmental projects under way during the year.

The Section continued to co-operate with the Agriculture Division in developing a programme of tabulations of the Farm Income and Expenditure Survey with a view to using the material to revise the Index of Commodities and Services Used by Farmers. Steps were also taken to revise the Index of Prices of Canadian Farm Products at Terminal Markets.

In recent years much attention has been focused on the need for more data on prices of capital goods. During the year, the Section collected more information on prices of industrial machinery and equipment and calculated preliminary indexes. Cost studies were initiated in connection with two new price indexes for highway construction and for electric generating installations. The Canadian Good Roads Association and the Canadian Electrical Association, which had requested these series, provided technical assistance in developing methods of handling data on these two specialized types of engineering construction.

The International Prices Section continued to measure comparative living costs in cities abroad for the purpose of adjusting allowances of personnel in the Canadian foreign service. The Section also undertook further studies of comparative food costs in remote locations in Canada, bringing to well over 200 the number of such indexes.

In a programme designed to meet the joint needs of Central Mortgage and Housing Corporation and DBS, the Retail Prices Section gave special attention to the measurements of rents. The rent survey, carried out by the Special Surveys Division in conjunction with the Labour Force Survey, was enlarged and will provide new statistics in this important area of consumer prices.

An historical study of Canadian retail prices of food from 1913 to the present, which will be published in 1960, was brought close to completion during the fiscal year. This comprehensive document, containing charts and a technical description of each series, is intended to serve as a reference paper for some years to come.

In addition to publishing its regular series, the Wholesale Prices Section has been broadening the basis and increasing the range of statistics of wholesale prices. Manufacturers Selling Price Indexes, based on the Standard Industrial Classification and therefore more suitable than a commodity classification for measuring prices of complex fabricated products, have been developed to the point that the data have been used to answer special enquiries; the indexes, however, have not yet been published. During the past year, attention was directed toward constructing a system of wholesale price

indexes based on the Standard Commodity Classification. In many cases the interest of users in more data on wholesale prices is in connection with supply escalator clauses.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

This Division, consisting of three sections, prepares a wide range of statistics on the financial structure of the three levels of government in Canada, employment and payrolls of government bodies, and the operations of transportation and public utilities.

In addition to its regular reports, the Public Finance Section prepared a summary of previously published statistics of the three levels of government in Canada for the use of officials attending the Dominion-Provincial meeting of Ministers of Finance and Provincial Treasurers; this material was published in a report entitled *Comparative Statistics of Public Finance, 1945 and 1951 to 1959*.

The seventh Dominion-Provincial Conference on Municipal Statistics had recommended changes in the content and form of municipal government reports. The *Municipal Finance Reporting Manual*, which is widely used as a text and reference document, was revised in accordance with these recommendations and made ready for distribution to municipalities early in the fiscal year 1960-61.

During the course of the year, the Public Finance Section took over from the Research and Development Division the work of processing data on government finance for purposes of the National Accounts; this change consolidates in one section all processing of government financial data and makes for more economical use of staff.

Plans were completed for initiating two new surveys, one on municipal expenditures quarterly and one on the financial data of government enterprises.

Late in the year the Government Employment and Payrolls Section published its first report on provincial government employment, covering eight provinces; it is hoped that the two remaining provinces, Quebec and British Columbia, will soon be included.

Despite initial difficulties, the Section advanced considerably the timeliness of the reports on Federal Government employment; thirteen monthly reports were issued. During the year reports were expanded to include a table combining all employees of the Federal Government, a provincial breakdown of employment and a sex distribution of all employees.

The varied work of the Transportation and Public Utilities Section is organized in three units (1) Road Transport; (2) Water, Rail and Air Transport; (3) Pipelines, Communications and Utilities.

The Road Transport Unit conducted its first tests of the reliability of data on motor transport traffic and published results for all provinces for the year 1958. With the advice and assistance of provincial authorities and the trade, the *Classification of Accounts for Motor Carriers in Canada* was revised

in accordance with the current accounting practices of trucking firms, thus making DBS statistics more comparable with individual company operations. Statistics were collected for the first time from contract freight carriers and will be included in the *Motor Carrier Freight* report for 1958. Arrangements were made with the Province of Nova Scotia to collect, jointly, information on motor carrier freight and buses in that province. Various steps were taken to improve statistics of road and street mileage and expenditure.

In order to facilitate long-term comparisons of railway employment, the classification of data for 1926 was reconciled with that for 1956 and published in the report *Railway Employees and Their Compensation 1926-56*.

Arrangements were completed with the St. Lawrence Seaway Authority to collect data jointly. For purposes of charging tolls the Authority requires a mass of commodity detail. The shipping companies have the option of filling in the details on the schedule or providing a copy of the ship's manifest. Many of them prefer the latter alternative which adds considerably to the work of compilation; at the same time it results in more accurate and more detailed statistics.

Schedules for civil aviation statistics were revised and expanded to obtain company data by base and by route. The uniform classification of accounts for air carriers was revised in line with the classification used by the Civil Aeronautics Board in the United States. The Department of Transport began to collect and to provide DBS with detailed traffic data for most of the airports under its jurisdiction; it is hoped to begin to collect in 1960 similar data for airports not under the Department's jurisdiction. The regular report *Civil Aviation* is to include in future separate information for companies operating helicopters.

With the advice of Federal and provincial government officials and the co-operation of trade associations, a monthly series of the transport of gas by pipelines was initiated; forms were prepared for annual reports on transport of gas by pipeline and on the distribution of gas. Preliminary studies were made on the comparative costs of gas consumed in various cities and towns with a view to the eventual publication of an annual report on this subject.

Following a pilot study of statistics of the radio and television industry for the year 1956, statistics were collected for the years 1958 and 1959. It is hoped to publish a report in 1960 and annually thereafter.

RESEARCH AND DEVELOPMENT DIVISION

The Division prepares and analyzes major economic aggregates such as the National Accounts and the Index of Industrial Production, which are widely used as comprehensive measures of economic activity by government departments, the business community and the general public. It is also responsible for publishing the *Canadian Statistical Review*, a compendium of the most important monthly or quarterly economic indicators, as well as for preparing the articles on current economic conditions contained therein.

The Division's research programme covers a variety of topics, such as income-size distribution, corporate financing, and real capital formation. From time to time, the results of these studies are published as reference papers.

A Dominion-Provincial Conference on Economic Statistics was held during the year. Discussion centered on provincial requirements for aggregative economic statistics, as well as the problems of zoning within provinces. An Interdepartmental Advisory Committee on economic statistics met during the year to discuss the continuing research programmes of this and other divisions.

The work of the Division is organized in two sections: National Income and Research Projects.

The regular quarterly National Accounts reports, reviewing current economic developments during 1959, continued to be prepared and published on schedule. The annual National Accounts report for the year 1958, containing additional detail and supplementary tables, was released at mid-year. The National Accounts are widely regarded as a key set of economic indicators on the prevailing state of the economy and have a wide application for economic decision-making by business organizations and governments. Statistical material and charts were prepared early in the year of the annual Budget White Paper reporting on the nation's economic position in 1959. In addition, the revised historical quarterly National Accounts series which had been under preparation for some time was released and published in *National Accounts, Income and Expenditure, 1947-57, by Quarters*. All the revised statistical material was seasonally adjusted by a new electronic computer technique.

The monthly Index of Industrial Production, a widely used economic indicator, covering the manufacturing, mining, and electricity and gas industries, continued to be released throughout the year. All this material is now seasonally adjusted by electronic computer techniques, and is being made available in much greater detail than previously. Work was pressed forward on the extension of the index of industrial production to cover all industries in the economy. This material is now being circulated within the government, although it requires further refinement before it can be brought to the stage of publication. When completed, this material will provide a measurement of the physical volume of output for the entire Canadian economy, classified by major industries. It will permit the developing strengths or weaknesses in the economic situation to be traced to the industry in which the changes have occurred. It also provides a cross-check on the independent measure of total production derived by deflating the expenditure side of the National Accounts.

Twelve articles dealing with current economic conditions or some new phase of the Bureau's statistical activities were prepared for release in the monthly issues of the *Canadian Statistical Review*. An article *Recent Developments in the Work of the Dominion Bureau of Statistics* was prepared for publication in the *Canadian Journal of Economics and Political Science*.

Considerable work was done during the year on technical problems related to the seasonal adjustment of economic time series, and a number of improvements were introduced to the series which are being published on a regular basis in the *Canadian Statistical Review*. Most of these series were converted to the electronic computer programme during the year. Little progress was made on extending the number of seasonally adjusted series published by DBS, mainly owing to recruitment difficulties. However, at year-end, two new positions had been filled, and a training programme was being carried out with a view to a gradual expansion of the work on seasonal adjustment. This work has been given great emphasis by the users of DBS data. The marked repetitive seasonal pattern which is characteristic of most Canadian economic time series tends to obscure the underlying cyclical trend in the economy; the seasonal adjustment process greatly facilitates analysis and interpretation.

Two major research projects were carried a stage further during the year. Progress on the work of seasonally adjusting the constant dollar estimates of Gross National Expenditure is well advanced, and it is expected that this material will be made available for publication within the next year, with a matching set of price indicators. In addition, plans are under way to extend the tabular framework of the quarterly National Accounts to include the government revenue and expenditure table and the national saving and investment table, both on an unadjusted and a seasonally adjusted basis; these two tables are at present only available on an annual basis. The change in the government surplus or deficit has been an important factor in the altered composition of total national saving in recent years; it had a significant role in the recent recession and recovery period, and has had widespread ramifications on the availability of credit and conditions in financial markets.

Since 1952, the Research Projects Section has been conducting small sample surveys to obtain data from which estimates of the size distribution of the incomes of non-farm families can be constructed. These incomes are cross-classified by various family characteristics such as age, sex, and labour force status of the head of the family. Such information on a current basis has proved to be useful for market research, studies of the ability to pay rental for housing accommodation, studies of the economic position of the elderly, and so forth. To give a more complete analysis of potential consumer purchasing power, these income data are supplemented occasionally by statistics on liquid assets and consumer indebtedness. An expanded survey of this type was undertaken in 1959 and the results will be published late in 1960 in *Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1958*.

At the request of the Interdepartmental Committee on Financial Statistics, attention is being given to methods of obtaining quarterly information on the assets and liabilities of non-financial corporations. This will indicate among other things, how corporations are financing capital formation (expenditures on plant, machinery and equipment). The role of financial intermediaries (banks, insurance and trust companies, etc.) in transferring funds from one sector of the economy to another through the capital market is also being studied.

Progress is being made in developing estimates of the stock of fixed capital (machinery and equipment, residential and non-residential structures) in Canada. Estimates are available from the National Income Accounts of the quarterly gross additions to the capital stock but no official estimates have been made of the total stock to which these additions are being made. Knowledge of the industrial distribution of the stock of fixed capital will provide information on the productive potential of the Canadian economy and will assist in explaining differences between industries in the ratio of labour input per unit of output. A by-product of this project will be the development of improved estimates of capital consumption so that the net additions to the stock of fixed capital can be calculated.

SPECIAL SURVEYS DIVISION

The Main functions of the Special Surveys Division are to obtain current information on population and housing, and through its eight Regional Offices across Canada to carry out field work for other Divisions of DBS. The work at Head Office is organized in three Sections, Field Administration, Processing and Analysis, and Sampling Consultation.

The monthly Labour Force Survey, which obtains information on population, labour force and related information, is one of the Division's main responsibilities. Trained enumerators visit a sample of households every month and the information elicited results in a monthly report *The Labour Force* which presents details of the employment situation for the country as a whole and for the six regions. At the same time, enumerators inquire about rents paid and facilities provided; this information is used to compile the rent component of the Consumer Price Index.

Additional questions were asked in conjunction with the Labour Force Survey in May of 1959. Information on facilities in Canadian homes was published in an annual report *Household Facilities and Equipment*. Information on family income, assets and debts is being prepared for publication.

As part of their continuing duties, the Regional Offices collect data on retail prices of commodities for use in compiling the Consumer Price Index. They also maintain, for purposes of reference, by local business firms and others, a file of all current DBS publications.

For some two years before the Decennial Census the Regional offices are involved in the field operations aspects of preparing for it. The staff assists in the testing of questionnaires and procedures and in checking the adequacy of the boundaries of the census areas. In June, 1959, a full scale test of questionnaires and procedures was carried out in Galt, Ontario and Joliette, Quebec and their surrounding rural areas.

Early in 1960 members of the staff from Head Office and certain regional offices visited the United States to observe the conduct of the 1960 census in that country.



ANNUAL REPORT

Bureau of



Annual Report
Domestic and Foreign

DOMINION BUREAU OF STATISTICS

*Annual
Report*

For the Fiscal Year ended March 31, 1961

DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS

CATALOGUE No.

11-201

ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1961



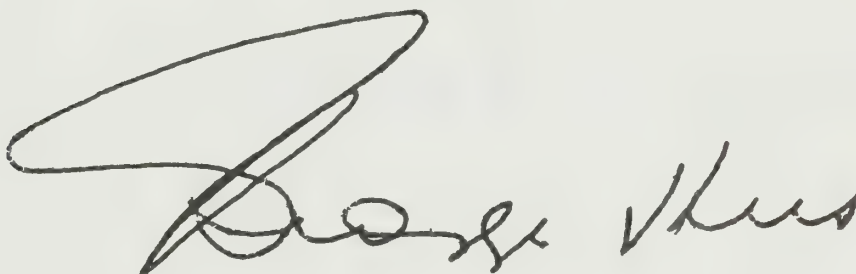
CANADA

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1961

*To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1961.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Lester Pearson". The signature is fluid and cursive, with a large loop at the beginning and a long, sweeping tail.

Minister of Trade and Commerce

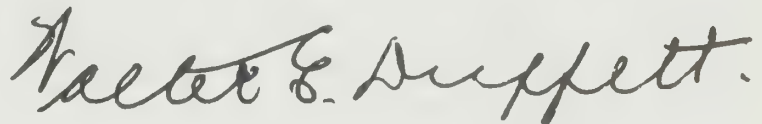
Ottawa, Canada
July, 1961.

*THE HONOURABLE GEORGE HEES,
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.*

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1961.

Your obedient servant,

A handwritten signature in dark ink, reading "Robert G. Duffett." The signature is written in a cursive style with a large initial 'R' and a trailing flourish.

Dominion Statistician

Ottawa, Canada
July, 1961.

GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's operations in the Dominion Bureau of Statistics as well as certain aspects of the activities of the office of the Dominion Statistician. Subsequent sections deal with the work of each of the Bureau's fifteen divisions.

During the fiscal year ended March 31, 1961, the Dominion Bureau of Statistics was engaged in final preparations for the tenth Decennial Census of Canada. At the same time, the Bureau maintained and further developed its regular statistical series reflecting the growth in social and economic activities of the nation.

The organization and planning work for the Census, which commenced three years ago, culminates in the 1961 Census of Canada. Included are censuses of population, agriculture, merchandising and services and a 20 per cent sample census of housing, income from all sources, size of family and movement of population. The actual enumeration begins June 1, in all parts of Canada except in the far isolated north where, because of difficulties of terrain, the census-taking had to begin in winter. The bulk of the counting is expected to be finished in cities in two weeks and in rural areas in three weeks. The first tabulations resulting from this enumeration will, it is hoped, be available early in 1962, and the last machine runs of the main population document will probably be finished late in 1962 or early in 1963.

For the first time, an electronic computer will be used to compile the data in this nation-wide census, eliminating the need for intermediary punched cards which were employed in the 1951 Census. The computer will be used by the Dominion Bureau of Statistics and other government agencies to do repetitive jobs of large volume and those requiring highly complex tabulations, and it will also enable the Bureau to extend somewhat its seasonal adjustment of important statistical series. In order to accommodate the electronic equipment in the Data Processing Centre, renovations to one wing of the main floor of the building were required.

An important development during the year in the Dominion Bureau of Statistics was the adoption of a new definition of unemployment based on the existing labour force survey. Statistics on employment, as well as unemployment, are being further developed. The Bureau has been endeavouring to fill the gaps and strengthen the existing statistics on government operations at all three levels, and on hospitals and the judicial system. A major revision of the Consumer Price Index was completed. Expansion of energy statistics—production and distribution of solid fuels, petroleum, gas and electricity—is under way in particular response to the new administrative and research needs of the National Energy Board. Preparatory work on productivity statistics is progressing with the tabulation of labour input data by industry. The adoption of a revised standard industrial classification is well under way, and export statistics were first published according to a new standard commodity classification in January, 1961. It is planned to convert import statistics to this classification, starting with January, 1963. To the existing survey on trusteed pension plans has been added the non-financial aspects. In forestry statistics, the experimental sample survey on the cut of forest products from private lands has been extended to four provinces. In addition, data on stocks of

necessities required in the event of a national emergency are being compiled by the Bureau in co-operation with the Emergency Supply Planning Branch of the Department of Defence Production.

Statistics on various subjects should be designed so that they fit an overall plan with coherence among the various parts. To this end a Central Research and Development Staff was created in 1944, which subsequently was established as a Division. This Division was responsible for the regular publication of the national accounts, indexes of production and a number of other statistical series. With the growth of its operation and publications responsibility, the Division found it increasingly difficult to maintain its integrating function and at the same time give adequate attention to the large and complex body of statistics for which it was responsible. Accordingly, in September, 1960 this Division was split into (a) a separate National Accounts Division (see page 24), and (b) a Central Research and Development Staff. The latter has been assigned to the Assistant Dominion Statistician for Statistical Integration in keeping with the inter-divisional nature of its duties. The purpose of this staff is threefold: (1) to help integrate and improve further the quality of DBS statistics; (2) to develop projects which cannot be carried out in other divisions either because of the nature of the projects or for other reasons, and (3) to provide, where required, assistance and advice on problems related to statistical subject matter.

Development projects in which members of the Central Research and Development staff were actively engaged in the past year included the further implementation of standard classification systems—industry, commodity and geographic; the initiation of a quarterly survey on corporate assets and liabilities under the guidance of the Interdepartmental Committee on Financial Statistics; the development of a set of estimates on the stock of capital and the improvement of the statistics on capital formation; and research studies of inter-industry flows of goods and services.

A Sampling Research and Consultation Service responsible to the Senior Mathematical Adviser was established during the year, to advise all divisions of the Bureau in the design and analysis of sample surveys, to undertake research in the field of sample surveys and to organize formal training courses in sampling techniques. It not only services divisions within the Dominion Bureau of Statistics, but also does consulting work with other government departments who have projects in common with the Bureau. Much of the research work done within the Bureau has been related to the redesign of the Labour Force Survey. A system to evaluate the quality of the work of the enumerators in the Labour Force Survey was designed and put into operation in November of 1960. During 1960 extensive preparations were made for a quality check of the 1961 Census.

The Advisory Board of Publications continued to examine the publication and distribution of Bureau reports. Further improvements were effected in the program of publications—some reports were discontinued while others were consolidated; some larger annual reports were divided into two or three in the interest of timeliness, and, in addition, new publications were introduced.

Close co-operation continued with departments of the federal, provincial and municipal governments, with suppliers and users of data and with international organizations. Senior officers of the Bureau represented Canada and

took part in the programs of the International Statistical Institute Conference in Japan and the British Commonwealth Statisticians Conference in New Zealand, as well as other conferences, both national and international in scope. During the year DBS welcomed visitors and students from many parts of the globe.

In connection with the Royal Commission on Government Organization under the chairmanship of Mr. J.G. Glassco, the senior officers of the Bureau assembled material in order to facilitate the Commission's inquiry into the operations of the Bureau.

This report would not be complete without mention of the continued contribution of the Bureau's competent and capable staff. Throughout the many and varied activities carried out by the Bureau, their loyalty and devotion to duty have been of vital importance in the accomplishments of the past year.

AGRICULTURE DIVISION

The Agriculture Division has the major responsibility in the development and carrying out of an integrated program for the provision of agriculture statistics. Although much of the data related to the program is collected by a number of divisions of the Dominion Bureau of Statistics, by provincial governments and the Federal Department of Agriculture, the Agriculture Division assembles such data for statistical analyses and publication in a number of reports.

The specific role of the Agriculture Division in collection of statistics is to undertake surveys (annual, monthly or seasonal) at the farm level for individual crops, the various kinds of livestock, as well as for farm prices and wage rates. It also conducts surveys at the manufacturing or wholesale level of production of dairy products, flour, millfeeds, sugar and oil seed products and stocks of fruits, dairy and meat products held in storage. In the conduct of many of these surveys, the Division co-operates directly with the provinces and other agencies.

Co-ordination of this work is facilitated by an annual Dominion-Provincial Conference on Agricultural Statistics, a Dominion Government Interdepartmental Committee, and several ad hoc interdivisional DBS committees. Close contact is also maintained with a host of industry groups interested in agriculture and with farm organizations. The chief purposes of such co-ordination are to assess demands for statistical series, to determine methods of collection and the agencies best suited to do the collection, to avoid duplication in collection and to promote good public relations with both suppliers and users of agricultural statistics.

The Crops Section maintained its extensive publication service during the year. As usual, much basic source material was derived from the results of mail questionnaire surveys of farmer respondents who report regularly on items such as acreages, yields, farm prices and stocks of major field and special crops. Survey data were supplemented, however, by material supplied by the Board of Grain Commissioners, the Canadian Wheat Board, Marketing Boards, private industry and other government departments. Data from all sources were integrated to provide a wide range of weekly, monthly, seasonal

and annual statistics relative to the production, marketing, processing and consumption of field and special crops. Analyses of the wheat and coarse grains situations are carried in the monthly *Wheat Review* and the *Coarse Grains Quarterly*.

The maintenance of a representative corps of voluntary farmer correspondents is an important part of the Section's program. The normal attrition of the list and non-response from prospective replacements presents difficult problems in maintaining a balanced, unbiased sample with respect to such general criteria as size of farm and uniform geographical distribution. For estimating production of field crops a general purpose sample of producers is used almost exclusively. Such a sample has obvious advantages with respect to economy, speed and simplicity of collection. However, as production of certain crops becomes more specialized, the general purpose sample loses in efficiency, forcing the introduction of special samples designed to meet the needs for estimating specific crops. Potato production in many provinces now would appear to be entering this special category and the Crops Section has been exploring the possibilities of developing specific sampling methods of this crop.

A new compilation of historical statistics has been completed containing detailed supply-disposition tables for the major grain crops for the past 27 years. This draft has been given limited circulation to principal users of this type of information so that suggested improvements and modifications can be incorporated in an official release.

During the past year experimental work on the preparation of an annual estimate of apple tree removals and plantings in Nova Scotia was continued. Data for the two years which are now at hand appear encouraging and if these estimates are borne out by the results of the 1961 Census it is anticipated that this information will provide a valuable new tool in the general statistical program for fruit crops. During the summer of 1960, the Quebec Bureau of Statistics in co-operation with the Dominion Bureau of Statistics undertook a study of the problems involved in preparing objective crop estimates for apples and work was carried out in a sample of orchards. In addition, a survey of fruit growers in the Niagara District on tender tree fruit disposition and losses was initiated last year. It is hoped that this will provide useful check data for the estimates now being prepared and will be particularly helpful in years of abnormal losses due to adverse weather conditions.

The Livestock and Animal Products Section issues quarterly reports on pig production and numbers, semi-annual reports on numbers of other livestock and poultry on farms, and annual estimates of production and domestic disappearance of meat and wool. Monthly and annual reports are published on output of all dairy factory products, fluid milk sales, total milk production and utilization, egg production and stocks of food products held in storages. Annual reports on fur farm statistics are also issued. During the year, agreement was reached with Alberta to utilize one fur farm schedule to gather data required by the province and for federal statistics thus eliminating the only remaining instance of some duplication in the collection of statistics from fur farms.

New work during the year included a study of fluid milk distribution in Alberta. Data were obtained from all known distributors as to the towns and villages included in their respective market areas. These data were gathered to supplement information which will become available from the 1961 Census in evaluating relative accuracy of fluid milk estimates. Another study involved a review of animal unit conversion factors used to express all livestock and poultry on farms in terms of a common denominator. The objective is to evolve conversion factors for grain-consuming animals which, when applied to inventory numbers, will reflect total feed grain requirements for the ensuing year.

The tabulation of numerous historical series of dairy and livestock statistics to incorporate all revisions to date was continued in preparation for an extension of the series of publications under the title *Handbook of Agricultural Statistics*.

The Special Projects Section continued to deal with the 1958 Survey of Farm Income and Expenditure. This survey was designed to provide: (1) estimates of income and expenditures associated with farming operations for use as benchmarks by the Farm Finance Section; (2) the distribution of expenditures among commodities and services used by farm families for use as weights in the construction of the price index numbers of commodities and services used by farmers; (3) estimates of income received by farm families from sources other than the farm; (4) the distribution of income among farm families, by size and source of income.

A preliminary tabulation of all survey schedules in Manitoba was undertaken and checked for inconsistencies. This operation proved to be very time-consuming and was completed only at the end of the year. Changes in the computer program, necessitated by this checking operation, are being made and as soon as they are complete, general tabulations for all provinces will be run.

The Farm Finance Section is responsible for the semi-annual surveys of crop acreages and livestock numbers and for estimates of cash and net farm income; volume and value of farm production; farm prices of agricultural products; value of farm capital and wage rates paid to hired farm help. In connection with the semi-annual crops and livestock surveys, approximately 540,000 schedules were distributed during each of these surveys in 1960 and approximately 20 per cent were completed and returned. Most of the schedules used in these surveys in Quebec are distributed through the rural schools. However, commencing with the June 1960 survey, direct mailing was instituted in one of the important regions resulting in a doubling of returns from that area and a substantial improvement in quality of information supplied.

Some study was given to the problem of providing more satisfactory estimates of quarterly changes in inventories of livestock for use in the National Income Division. No satisfactory solution was obtained during the year and study will continue. A detailed study of farm prices reported by farmer correspondents was continued; this study includes a consideration of the various channels through which farmers market their produce.

BUSINESS FINANCE DIVISION

The main functions of the Division are to provide data on current and prospective capital and repair expenditures in Canada, information on scientific research-development expenditures, estimates of construction activity, estimates of profits and other information on corporate activities and data on pension plans. In addition the Division co-ordinates the work of keeping up-to-date a list of new establishments and is also responsible for accumulating and maintaining the standard list of establishments surveyed by the various divisions of the Bureau.

The report *Private and Public Investment, Outlook 1961* was released late in the fiscal year. These estimates cover the capital and repair spending intentions of business, institutions, governments and individuals for housing. The capital investment intentions report is a key statistic for assessing future trends in the economy and is widely used as a basis of decision-making in government and the business community. Capital expenditures account for a large part of national production and the size and content of the program are valuable indicators of the demands likely to be made on the economy.

The report *Construction in Canada, 1958-60* was released during the year. The regular monthly report *Building Permits* continued to provide data on building activity in over 1,000 municipalities.

In co-operation with the National Research Council a report *Federal Government Expenditures on Scientific Activities* was released covering the fiscal year 1958-59, paralleling the survey covering research-development activity in Canadian industry. A survey covering the industrial sector for the year 1959 was conducted during the year and results are to be released shortly.

The regular quarterly reports on corporate profits and related data were published for the fourth quarter of 1959 and the first three quarters of 1960.

The pilot survey undertaken during last year to secure statistics on changes in corporate liquidity was continued and expanded. Further development work was done in this area and it is planned to conduct this survey on a continuing basis covering all sectors of industry beginning early in the next fiscal year.

The Division prepared the regular monthly series of cheques cashed and the quarterly series covering commercial failures which had been transferred from the National Accounts Division during the previous year. These two economic indicators are of special interest to the financial community. It also completed, for the use of the Central Mortgage and Housing Corporation, a survey of mortgages and agreements of sale held in estates, trust and agencies.

The report *Trusted Pension Plans, Financial Statistics, 1959* was published during the year. The survey inaugurated in 1957 is to be continued on an annual basis. Considerable interest is being shown in this information because of the recent rapid growth in the trustee method of funding pension liabilities. In addition, the report indicates what portion of the assets deposited with trust and investment companies is invested in pooled funds on behalf of the smaller employees. Survey of the pension area was expanded late in the fiscal year to cover the non-financial aspects of all pension plans in operation in

Canada. The survey, which is to be conducted annually, is designed to obtain selected information about some of the terms of the plans, such as eligibility, contribution formulae, the type of carrier involved and cash option arrangements.

The Division continued to keep up-to-date and publish annually the *Survey of New Firms*. Names, addresses and principal products manufactured were provided for over 4,000 new establishments. This centralized body of information is used by the Bureau of Statistics and other government departments to keep mailing lists current and by business organizations wishing to keep informed of new entrants in particular industries and areas.

Work of constructing a standard list of establishments for use by all divisions of the Bureau continued during the year. The bulk of the manufacturing sector of the standard list was completed and preparatory work was done to expand the standard list into the non-manufacturing sectors, specifically wholesale trade, transportation and utilities. The list, when complete, will facilitate direct comparability of the main series of industrial statistics and will standardize the application of the Revised Industrial Classification. The bulk of the survey coverage in the Division has been recoded on the basis of the Revised Industrial Classification. This work will continue during the coming year to allow for the publication of survey results on the revised basis to parallel other series issued throughout the Bureau.

CENSUS DIVISION

The activities of the staff of this Division during the past twelve months have been centered around final preparations for taking the 1961 Census of Agriculture, Population, Housing, Forestry, and Merchandising. These include the preparation of the questionnaires, the administrative forms required in connection therewith, the manuals of instruction for field staff, instructions for editing and coding the enumeration documents, the instructions for machine edits, and the tabulation programs required for the respective subject questionnaires. In addition, the descriptions and maps for some 32,000 Enumeration Areas were prepared for the individual enumerators, as well as District maps for the Census Commissioners and Regional Office staffs. Revisions of the descriptions and maps were made following suggestions from the Commissioners, and were incorporated into the final descriptions for each census district.

The enumeration supplies were packed for the 32,000 Enumeration Areas as well as supplies for the Commissioners and Regional Offices. Owing to the decision to change two of the Population Census Enumeration Forms, a re-packing of the enumeration boxes was necessary. Revisions in the Enumeration and Training Manuals were also necessary to take care of the changes in the enumeration forms.

Estimates of staff requirements for processing the census documents in the Regional and Head Offices were prepared and discussed with the Civil Service Commission, as well as the annual budget.

Negotiations for completing the Census in the Northern Areas of Canada, of persons living on Indian Reserves and in military establishments were completed with other Government departments concerned.

Prior to the close of the fiscal year, extensive training programs in both English and French of personnel from the Regional and Head Offices were conducted preparatory to selecting 53 Master Trainers for instructing the 1,336 Census Commissioners.

In the Administration Section, some 45,000 applications for verification of age, using early census and National Registration records, were received and processed during the year.

In the Analysis Section, the regular series of annual, semi-annual, and quarterly estimates of population were prepared and published.

Research studies in connection with preparation of estimates of population for metropolitan areas were continued, and calculations of net migration by counties for earlier censuses were made in preparation for a monograph planned for the 1961 Census.

The Director of the Census and other members of the Division participated in various phases of the United States 1960 Census of Population, Agriculture and Housing. Committee reports, technical papers, and other census material were exchanged between the two countries.

Officers of the Division assisted in the training of International Co-operation Administration and United Nations observers studying census methods in Canada.

EDUCATION DIVISION

Because of rapidly increasing enrolments at all levels of education, a related demand for more accommodation and more qualified teachers, combined with increasing costs, demands on the Division for information have increased. To meet these demands, schedules are revised and supplemented constantly and new series are added which result in statistical publications concerning public and private, elementary and secondary schools, trade schools and technical institutions, colleges and universities, libraries, museums and adult education activities.

One of the prime functions of the Division is that of co-ordinating provincial educational data on a comparable basis for all Canada from which governments, organizations and individuals benefit. In order to collect and co-ordinate such information, the Division co-operates closely with provincial governments, federal departments and agencies and a large number of organizations including the Canadian Education Association, the Association Canadienne des Édicateurs de Langue Française, the Canadian Teachers Federation, the National Vocational Training Advisory Council, the National Conference of Canadian Universities and Colleges, the Canadian Library Association, the Canadian Association for Adult Education, the Canada Council, UNESCO and several American educational organizations. More recently, there has been some indication of greater co-operation among provincial departments of education, teachers' and trustees' organizations, superannuation commissions and others interested in school activities. Increased concern has been shown in relating skilled manpower and education, and in the related topics of pupil progress through grades, drop-outs, student counselling and data on vocational courses.

Preparations for the second Canadian Conference on Education, to be held in February 1962, are under way and in this respect the Division has been consulted on many aspects of education, as well as asked to prepare a special publication. A preliminary report on education, which includes estimates on education finance, was released in May, 1960, in order to meet the demand for current statistics; this will be followed shortly by a second volume. An historic series of data on education from the time of Confederation, where possible, has been undertaken in the past year.

One of the results of the Fifth Dominion-Provincial Conference on Statistics of Elementary and Secondary Education held in 1959 was the collection of much of the data at the beginning rather than the end of the school year so that totals can be made available during the current academic year. Attempts to produce more timely statistics resulted in former biennial reports now being produced annually, such as the *Survey of Elementary and Secondary Education*.

Interest in *The Organization and Administration of Public Schools in Canada, 1960*, continued and a reprint was necessary. As well, *Student Progress through the Schools by Grade, 1960* had a surprisingly large sale and also had to be reprinted. Future reports, using census data to supplement those of the Division should provide more information on school drop-outs.

In November, the publication *University Teachers' Salaries, 1937-60* was released and the regular report *Salaries and Qualifications of Teachers in Universities and Colleges 1960-61* will be available this summer. *The Survey of Higher Education* is nearing completion despite difficulties encountered and will be published annually in the ensuing years. *University Entrance Awards, 1960* sold well, evidencing keen interest in this subject, and its companion, *Awards for Graduate Study and Research, 1961*, will be released in April.

The *Annual Survey of Adult Education* was issued for the first time in 1960. It covered the activities of 43 universities and colleges as well as government departments and agencies. It is expected that the scope of the survey will be expanded from time to time until the whole field is covered. In June, 1960, the Special Surveys Division of the Bureau conducted a survey on adult education participation at the same time as the Labour Force Survey and valuable information was obtained which will be published this summer.

Library statistics are now issued in two parts: Part I—Public Libraries and Part II—Academic Libraries. For the first time a brief survey of central school libraries for centres of 10,000 population and over was added pursuant to a resolution of School Library Workshop held in June, 1959. It is expected that within two years information will be made available about six months after the close of the year.

The Vocational Education Section worked in conjunction with the Canadian Vocational Training officials of the Department of Labour to produce reports on vocational education and manpower. The Division is continuing to expand all series in these reports and by next fall coverage should be reasonably complete.

HEALTH AND WELFARE DIVISION

The Division is responsible for implementing those statutory functions of the Bureau concerned with the health of the Canadian people, with law enforcement and the administration of justice. The health statistics program is carried out by three sections; one of these prepares the comprehensive series of national and provincial vital statistics derived from legal registrations of births, deaths, stillbirths and marriages, and undertakes special analyses of mortality, life expectancy and fertility; the second is responsible for statistics of general and special hospitals, including the characteristics of patients in mental institutions and tuberculosis sanatoria; the third health section produces statistics on illness and health care. Judicial and criminal statistics are produced in a fourth section, based upon returns from police, courts and correctional institutions.

During the year regular weekly statistics of the incidence of notifiable diseases in Canada and each province were released for the use of public health authorities. These were supplemented in early 1961 by the inclusion of special data on the incidence of influenza and other respiratory conditions to assist in an evaluation of the need for immunization programs. In addition to the weekly figures, an annual report of the incidence of notifiable diseases in 1959 was published, together with a special publication on poliomyelitis.

Regular annual reports were released on the amount and nature of illness in the Federal Civil Service, and on the home nursing services provided by the Victorian Order of Nurses throughout the country. Work continued on the winding up of the 1950-51 Sickness Survey in the form of several subsidiary reports on the duration and severity of illness and on the amount of health care received for various diseases.

In the field of vital statistics, extensive basic tables were supplied to the provinces in compliance with the existing Dominion-Provincial agreements, and the regular monthly and annual reports of vital statistics, containing national and provincial data, were published. To meet increasing demands for a fuller analytical treatment of vital statistics a number of special reports were issued on deaths from accidents and life expectancy, while others were planned on infant mortality and on deaths from particular diseases.

Operations of the Division concerned with preparing alphabetical indexes and numerical registers of births, deaths and marriages for the provinces and the Family Allowances administration were eliminated in part during the year in consultation with those agencies. Further curtailment of these indexing functions is being negotiated in order to divert resources to statistical activities. These matters, together with a wide variety of other registration and statistical subjects, were discussed by the Vital Statistics Council for Canada at its annual meeting in November 1960. The Council also adopted a new draft constitution providing for full membership of the Yukon and Northwest Territories.

The expansion of the Division's program in hospital statistics, to meet increased requirements of federal and provincial hospital authorities, was hampered during the year by the delay in securing the completed annual returns from hospitals. These returns have been considerably enlarged to include information used by the provinces and the Department of National Health and

Welfare for hospital insurance purposes. The prospects for securing earlier returns appear, however, to have improved toward the end of the year. The recruitment of specialist personnel with extensive background in hospital work has assisted greatly in editing of source data and the maintenance of liaison with hospital authorities.

The tuberculosis statistics produced in the Division had, up to the present year, been based on mortality and on admissions to tuberculosis sanatoria. The only statistics on the general incidence of tuberculosis, derived from summary returns of notifiable diseases, were limited to simple counts and were of doubtful reliability. During the year under review, the Division implemented the recommendations of a National Tuberculosis Conference held in March, 1960, and commenced publication of a monthly report of new active and reactivated cases, with distributions by age, sex and type of tuberculosis.

The important series of statistics on mental illness was continued during the year, with regular publication of data on mental institutions, including psychiatric units, mental health clinics and hospitals for mental defectives. Based on returns for individual patients, statistics were published on the number, diagnosis and characteristics of patients admitted to mental hospitals and on the lengths of stay and other particulars of patients discharged.

The Division's program covering statistics of crime and corrections emerged from the primary developmental stage initiated the previous year, with the introduction of new reporting and processing procedures for police statistics and the near completion of work on a uniform crime records manual prepared in collaboration with a committee of the Canadian Association of Chiefs of Police. These developments were facilitated considerably by the acquisition of senior personnel with experience in police work. Progress in the area of correctional statistics was less rapid because of difficulties in recruitment of officers with corresponding background in corrections.

Concurrently with this developmental work the regular annual reports were published relating to police work, court proceedings and juvenile delinquency. Special material was also prepared for the Commissioner of Penitentiaries, the RCMP and in response to requests.

The varied program of the Division as a whole required extensive consultation on the part of its officers with those of other federal departments, provincial governments and voluntary associations as well as participation in the work of committees, seminars and institutes in the health and welfare field.

INDUSTRY AND MERCHANDISING DIVISION

The Industry and Merchandising Division is responsible for statistics in two broad fields of activity: (1) *Industry*, comprising logging, fishing, mining and manufacturing; and (2) *Merchandising and Services*, comprising retailing, wholesaling, and the service trades. Statistics on these and related activities are widely used by governments and business in making policy and administrative decisions, in keeping informed on business trends, in appraising markets, in planning capital expenditures and in many other ways.

In the industry sector the basic survey is the annual Census of Industry which has been carried out each year since the formation of the Bureau in 1918. It provides standard industry-type statistics on mining, logging and manufacturing. The report forms ask for data for each establishment on number of employees, salaries and wages, man-hours worked, cost of materials, fuels and electricity, factory value of shipments and the year-end value of inventories. It also provides a great deal of commodity data; the forms ask for quantities and cost at works of the principal materials used, and complete details on quantities and values of products shipped. Up-to-date information on the value of manufacturers' shipments and inventories is provided by a monthly sample survey of large firms, and on important commodities by means of monthly or quarterly complete-coverage surveys. The census compilations for 1959 were completed for the mining industries in December, 1960 and for manufactures in April, 1961. Results are being published in about 200 industry reports. In addition, 65 monthly or quarterly reports, covering about 500 items, are issued regularly.

In merchandising and services the basic survey is the Decennial Census which provides data by trades and by geographical distribution on employment and payrolls, sales, inventories, receivables, and some commodity estimates. The first such census was taken in 1931, others followed in 1941 and 1951 and preparations are almost completed for the 1961 survey. In the inter-censal years estimates of retail and wholesale sales and inventories are prepared by using complete-coverage surveys of large stores and a 10 per cent sample of small independents. Annual surveys are carried out for a few service trades. Estimates of consumer credit are prepared monthly and quarterly.

Four special major assignments were completed or were well under way in 1961. Firstly, the revised Standard Industrial Classification was implemented in the Census of Industry for 1960. This necessitated the re-coding of all establishments, the re-design of many reporting forms and, in order to provide a link between the new and the old series, the recompilation of principal statistics for 1957, 1958 and 1959 on the basis of the new classification. The 1961 Census of Merchandising will also be on the new classification.

Secondly, a great deal of work was done in preparation for the change to the "new establishment definition" planned for 1961. Briefly this new concept demands coverage of all activities of the establishment in a single report and the classification of the report in total to the major-activity industry, whereas former practice attempted to procure separate reports for each activity, this resulting very often in arbitrary breakdowns. Correspondence is being carried on with all multi-unit firms or establishments to determine the activities for which proper accounting records are available.

Thirdly, the plans for 1961 Census of Merchandising and Services were brought to the final stages. Meetings were held with trade associations, representatives of business firms, with government departments and other organizations. Census report forms were tested in the city of Galt, Ontario, in 1959 and the results were published. The content of the forthcoming Census will differ from previous censuses in that it provides for information on costs of merchandising, makes possible more precise classification of establishments, provides more precise measures of labour input, and requires comprehensive data on operating expenses in the wholesale and service trades.

Fourthly, the research being done on productivity was expanded in scope. The compilation of man-hours worked in manufacturing industries was nearly completed for 1957 and a start was made on 1958 and 1959 schedules. Editing procedures were developed for the use of the Operations Section which will assist with the work in 1960. Part of the limited resources was devoted to a pilot study on integration of data reported to the Census of Manufactures and to the employment division for long-term productivity series. Preparatory work was started on some non-manufacturing industries.

During the year, a revised Chemical Directory was sent to the printers; it lists all chemical products made in Canada along with the names of the manufacturers. Beginning with January, 1961 the seasonally adjusted data on manufacturers' inventories, shipments and new orders are being published in the regular monthly report. The January issue carries the series back to 1952. Much work was done for government departments and for industry in connection with the tariff hearings on textiles and on chemicals. Arrangements were completed whereby the Division will collect and compile data on stocks of foods, clothing and other items considered by the Emergency Supply Planning Board to be essential to survival in the event of a nuclear war. Attention was given to a review of the usefulness of present surveys. An intensive study of collection procedures was carried out and certain changes are being tried out for the 1960 census of manufactures in an effort to improve timeliness of publications. Again there were significant increases in the demand for special compilations, in answering mail inquiries, and in meeting visitors.

Work on historical statistics was continued as resources permitted and, in addition, the Division gave considerable assistance to the historical statistics project being sponsored by the Canadian Political Science Association. Special tabulations of fisheries statistics were prepared for the International Commission on North Atlantic Fisheries from the record cards maintained by the Fisheries Research Board, and special punch-card runs were made for the Department of Fisheries and the Department of Public Works. In forestry, the experimental sample surveys conducted in co-operation with provincial departments to determine the cut of forest products from private lands were extended to cover all of New Brunswick and to selected forest districts in Nova Scotia, Prince Edward Island and Alberta. The first official federal-provincial conference of mining statisticians was held in May, the principal objectives being to bring about uniformity in published data and to eliminate duplication in collection and compilation. The development of more comprehensive statistics on wholesaling was carried a step further with the publication of the results of the 1958 complete-coverage survey of wholesalers proper, and of data for 1957-59 relating to agents and brokers.

INFORMATION SERVICES DIVISION

This Division serves as the focal point for the release and dissemination of the published information of the Dominion Bureau of Statistics and produces two official compendia of information and the Canadian economy. In performing these functions, it compiles and publishes the *Canada Year Book*, the *Official Handbook Canada*, the *DBS Daily and Weekly Bulletins* and the Bureau's

catalogue of *Current Publications*. In addition, it maintains a suitably stocked library for statistical research and study, answers general enquiries, and promotes good public relations.

A specific example in the sphere of public relations was the inauguration on February 20, 1961, of a policy change authorizing an advance release of DBS publications to the Press Gallery and the Canadian Press, thereby facilitating more adequate analyses and press coverage.

The Division has contributed also to the planning and implementation of the Bureau's 1961 Census advertising and public relations program, while at the same time lending the services of its Chief of Press and Publicity to the Secretariat of the O'Leary Royal Commission on Canadian Magazines and Other Periodicals.

The program of work of the Canada Year Book Section, concerned with the editing and production of both English and French language editions of the 1300-page *Canada Year Book* and the 320-page illustrated handbook *Canada*, was redistributed among the Chief of the Section and a slightly enlarged senior editorial staff with a view to expediting the publication schedules and bringing out both language editions of each book almost simultaneously in the early summer and autumn. Considerable progress in this regard was achieved during 1960, with the English and French editions of *Canada 1960* being released in October and November, respectively, and the *Canada Year Book 1960* in December, to be followed in April, 1961 by *Annuaire du Canada 1960*. Publication schedules for the two 1961 editions of both the Handbook and the large reference Year Book were so well advanced at the close of the fiscal year as to suggest their completion by July and October, respectively.

The functions of the Press and Publicity Section are to publicize the Bureau's services and obtain the most effective distribution of DBS material. It produces the *DBS Daily and Weekly Bulletins* which serve to release and to summarize each day's and week's publications; it replies to a large number of inquiries requiring the assembling of published statistical material from a variety of sources or special investigation; it endeavours to maintain good public relations with the daily and periodical press and prepares special articles, information folders, and conference display material promoting DBS services. It has established special promotional mailing lists covering over a dozen major-interest-groups. In addition, it publishes the annual DBS catalogue of *Current Publications*, the 1960 edition bringing up-to-date the 1959 listings and containing a title index and other new features to facilitate the use, ordering and filing of hundreds of DBS publications of various periodicity.

The Division provides the latest Canadian statistical material regularly to a score of national and international year books, almanacs, and booklets, including the United Nations Statistical and Demographic Year Books.

The DBS Library maintains a large stock of books, periodicals, documents and reports for the use of the staff and research workers. In addition to Canadian and Commonwealth material, this collection includes the statistical publications of foreign countries received on an exchange basis from nearly all areas of the world. Library resources have been used heavily during the year not only by Government departments but representatives of business firms. There has been a considerable increase in requests from libraries in both the United States and Canada for inter-library loans of material.

Because of limited library space, considerable energy has gone into co-ordinating the library's resources with those of other libraries of the Federal Government, and transferring material not required for permanent DBS reference to the National Library. Space obtained from these endeavours has been used to rearrange the directory collection and to start organization of a central periodical section.

The basic work on an *Historical Catalogue of DBS Publications* has now been completed and plans are being made for suitable arrangement of the material with a view to its publication.

INTERNATIONAL TRADE DIVISION

The field of statistical information with which the International Trade Division is concerned covers a wide range of economic and financial transactions between Canada and other countries. It is composed of two main sections, one dealing with external commodity trade and the other with balance of payments, investment position and international travel. The statistics are in demand by a broad group of users in both the business world and governments, being used for a great variety of purposes, including economic and financial analysis, market studies, and commercial relations.

The uses to which External Trade statistics are put demand that they be published promptly and in considerable detail by commodity and country. Export statistics were published as promptly as is economically possible throughout the fiscal year 1960-61 and some progress was made in reducing the delays in producing import statistics.

It has not yet proven feasible to implement a production schedule for import statistics owing in part to the diversion of resources to the task of adapting these tabulations to the new electronic computer. It is expected that once import tabulations are fully programmed for the computer there will be a very considerable gain in timeliness over what is feasible using traditional punch card equipment.

A new Export Commodity Classification was introduced with statistics for January 1961. The new classification is based on the Standard Commodity Classification which was developed in the Dominion Bureau of Statistics as a tool for integrating statistical series derived from different sources. The new classification is intended to provide export data which are more comparable with other commodity series and also to provide a framework which will facilitate some expansion of the degree of detail shown in Canadian export statistics. The introduction of the new classification will delay the publication of detailed export statistics for several months in 1961, but these delays are expected to be overcome by the end of the calendar year.

Considerable progress has been made in preparing the new Import Commodity Classification, also based on the Standard Commodity Classification, and a number of classes extracted from the new classification were introduced on January 1, 1961. While overall implementation of this new classification has been delayed until January 1, 1963, it is expected that in the interim other portions will be introduced to ease the eventual full implementation of the new framework.

The resources of the Balance of Payments Section continued to be almost all absorbed by the current production of regular reports. A modest improvement was achieved in the release date for the annual report, and quarterly publications continued to be released on schedule. It was possible, nevertheless, to carry out some marginal improvements of a developmental character. During the year there was a net addition of nearly 500 companies to the record of those in which non-resident capital is associated directly or indirectly, bringing the total to nearly 9,400. Consolidation of a number of schedules used to produce quarterly data was effected, and the work load was also reduced by providing for their mechanical preparation.

A special industrial analysis of dividend payments to non-residents was carried out and was published in the last annual report of the *Canadian Balance of International Payments*. This report also contained more extensive data than has heretofore been available on non-resident holdings of Canadian treasury bills. Further developmental work is being carried out as opportunities permit on the measurement of short-term movements of capital which are assuming increasing importance in the international financial economy. Work is also in process on new bench-mark data for Canadian-owned holdings of stocks of United States companies.

Statistical series covering non-resident automobile movements in Canada were altered through a change in procedure introduced by the Department of National Revenue for admitting foreign vehicles into Canada. The document in use has been simplified without seriously affecting the statistical data available but the volume of forms to be processed for this category of traffic has been more than doubled. The monthly publication of preliminary information on the number of permits issued for the admission of foreign vehicles has been re-introduced after a lapse of fifteen months arising from the changes. Special studies have been made to blend the statistics from the new classifications with those of previous years in an effort to reduce incomparabilities to a minimum. The new procedure has a tendency to encourage wider use of commuting permits for extended periods and this has necessitated further studies to improve the estimates for this category. Travel between Canada and overseas countries, particularly by Canadians, continues to expand rapidly each year. In order to improve the quality of the estimates in the Canadian balance of international payments it was necessary to expand the sampling of Canadians returning, and distribute questionnaires to overseas visitors at ocean ports and international airports. Closer liaison with the Department of Citizenship and Immigration has made it possible to improve the sampling of Canadians returning from visits to the United States by non-automobile types of transportation.

LABOUR DIVISION

The Labour Division consists of three Sections: the Employment Section, the Unemployment Insurance Section, and the Labour Income and Research Section. The Employment Section collects industrial establishment records of employment, hours of work and wages and salaries; it publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The employment index numbers are widely used for industry and

area analysis of employment changes, while per capita data on earnings and hours of work have several uses, perhaps the most important of which is in collective bargaining between labour and management. The Unemployment Insurance Section provides the Unemployment Insurance Commission with operational statistics; it also publishes statistics of public interest concerned with unemployment insurance claims and the amounts of benefits received by beneficiaries. The Labour Income and Research Section issues labour income estimates giving industry and area totals and undertakes research and analysis pertaining to the general field of labour statistics.

During the year the Employment Section added to its monthly publications a number of seasonally adjusted industry series and area consolidations for the Atlantic and Prairie regions. The number of monthly reports being tabulated to produce statistics on employment, per capita earnings and hours of work increased by 8 per cent, and the volume of correspondence concerned with requests for this information continued at a high level.

Further progress was made in a major revision program which will take several years to complete; it involves adoption of a revised Standard Industrial Classification and a standard definition of the term business establishment, as well as the adoption of a new 1961 base period for employment index numbers. This revision together with the re-working of historical series to maintain continuity with past years must proceed for a limited time as an operation paralleling the production of current statistics in their present form. Temporary positions have been secured for the project but they have not yet been filled. This is work which requires highly specialized experience and which is very difficult to find outside of the existing staff engaged in regular operations.

The program of the Employment Section was further extended during the year following a recommendation by an inter-departmental committee concerned with the need of new employment series to fill gaps in existing records for the analysis of employment and unemployment conditions. Subsequently, a number of new positions were established to sample employment in small establishments and to prepare on a monthly basis major industry employment estimates for individual provinces. Collection of sample data representing some 300,000 business establishments is to be undertaken in 1961, but regular publication of estimates from these data will not follow until sampling and data processing operations have been carefully tested.

Meanwhile, the Labour Income and Research Section has completed series of provisional estimates of employment for major industries in each province for the years 1953-60 inclusive. These series may be revised and extended after a period of testing.

The Unemployment Insurance Section continued its regular program of preparing statistics used by the Unemployment Insurance Commission, the Actuary and the Unemployment Insurance Advisory Committee. A substantial amount of this material is purely of interest to those concerned with the Commission's operations, but some aspects are of public interest and this information is summarized in published reports.

In meetings with the Unemployment Insurance Commission the general program of unemployment insurance benefit statistics was reviewed during the year from the standpoint of improving usefulness of published data and eliminating any unnecessary collection or processing procedures. As a consequence, provision was made for inclusion in the annual report *Benefit Periods Established and Terminated under the Unemployment Insurance Act* of more provincial data for seasonal benefit cases, and for discontinuing processing of cases involving payment of benefit during periods of illness.

At the request of the Unemployment Insurance Commission a detailed investigation was undertaken of the incidence and duration over a number of years of claims from married women and older workers. Results of this inquiry were used by the Commission in recommending to the Unemployment Insurance Advisory Committee measures for protecting the fund against an undue drain in respect of claims from such persons.

Arrangements were made with the Unemployment Insurance Commission for obtaining index cards for firms included in the Commission's Master Index of Employer Registrations. The co-operation of the Commission was also secured in notifying the Employment Section of Index changes and investigating discrepancies between information supplied from the Index and data available for the same firm from Bureau sources. This material is being used to establish and maintain a frame for sampling employment in small business establishments.

During the year, the Section prepared for use primarily in the coding of the 1961 Census data, a list showing the name, location and the new Standard Industrial Classification code of some 90,000 business establishments.

NATIONAL ACCOUNTS DIVISION

The National Accounts Division was created in September, 1960, by a re-organization of the former Research and Development Division into two parts:—a National Accounts Division, with responsibility for operating the major sets of economic statistics originally developed and maintained in the Research and Development Division; and a Central Research and Development Staff, with responsibility for carrying forward research, development, and statistical integration throughout DBS. The re-organization thus broadly has the effect of assigning operations and analysis to the newly created National Accounts Division, with the research and development functions assigned to a Central Staff attached to the office of the Assistant Dominion Statistician responsible for statistical integration.

The National Accounts Division carries responsibility for preparing and analyzing major sets of economic statistics such as the National Accounts and the Index of Industrial Production. These data are widely used as comprehensive measures of economic activity by government departments, the business community, and the general public. The Division is also responsible for publishing the *Canadian Statistical Review*, a compendium of the most important monthly or quarterly economic indicators, as well as for preparing the articles contained therein.

The Division's work is organized into four sections – the National Product Section, the National Expenditure Section, the Industrial Output Section and the Current Business Indicators Section. The National Product and National Expenditure Sections together prepare the regular quarterly and annual National Accounts reports, reviewing current economic conditions in terms of the major national income and expenditure flows. The Industrial Output Section publishes the monthly Index of Industrial Production, a widely used economic indicator, covering output in the manufacturing, mining, and utilities industries. The Current Business Indicators Section is responsible for the preparation and publication of the *Canadian Statistical Review*, and for the program of seasonal adjustment of economic time series.

During the year, the statistical material carried in the quarterly National Accounts was considerably expanded. In collaboration with the Public Finance and Transportation Division tables on quarterly government revenues and expenditures, by levels of government, and on national saving and investment, for the years 1950 to 1960, were prepared and published on both a seasonally adjusted and unadjusted basis. This material is now part of the regular publication program of the quarterly National Accounts. It is expected that the new material will contribute significantly to the usefulness of the quarterly National Accounts for current economic analysis. Changes in the surplus or deficit position of the government sector have an important effect on the composition of the nation's saving and on the flows of income between the public and private sectors of the economy.

The regular quarterly National Accounts reports, reviewing current economic developments during 1960, continued to be prepared and published on schedule. The annual National Accounts report for the year 1959, containing detail of main aggregates and supplementary tables, was released at mid-year.

The monthly Index of Industrial Production continued to be released throughout the year, and further work was carried out on the extension of the Index to cover all industries in the economy. This latter project is still in the developmental stage, but the material continues to be circulated within the government for purposes of testing and checking the results. When completed, this material will provide a measurement of the physical volume of output for the entire Canadian economy, classified by major industries. It will thus permit the developing strengths or weaknesses in the economic situation to be traced to the industry in which the changes have occurred, and provide a cross-check on the measure of total production derived by deflating the expenditure side of the National Accounts.

Twelve articles dealing with current economic conditions or some new phase of the Bureau's statistical activities were prepared for release in the monthly issues of the *Canadian Statistical Review*. An article, *Recent Developments in the Work of the Dominion Bureau of Statistics* was prepared for publication in the *Canadian Journal of Economics and Political Science*. The timing on the release of the *Canadian Statistical Review* was speeded up by about one week, and further improvements in timing are expected.

The number of seasonally adjusted time series carried in the *Canadian Statistical Review* was expanded during the year, with about 50 additional series now available on a seasonally adjusted basis. These include data on manufacturing inventories, shipments, new orders, unfilled orders, labour

income by industry and by region, and retail sales by region. A program for seasonally adjusting time series by means of an electronic computer was completed during the year, and DBS data are now being seasonally adjusted on the new 705 electronic computer, recently installed. This work has been given a high priority by users of DBS data. The marked repetitive seasonal pattern which is characteristic of most Canadian economic time series tends to obscure the underlying cyclical trend in the economy. The seasonal adjustment process greatly facilitates analysis and interpretation.

Closer collaboration with the Statistical Office of the United Nations and the newly formed Organization for Economic Co-operation and Development was also established during the year. In the past, the main information which was furnished to these two organizations consisted of annual data relating to the National Accounts and the Index of Industrial Production. Both organizations are now issuing monthly or quarterly releases containing the significant economic statistics of member countries. The National Accounts Division has assumed the responsibility for supplying these two international agencies with such monthly and quarterly economic statistics as they require.

During the year, the Director of the Division attended a meeting of international experts on techniques of seasonal adjustment, sponsored by the Organization for European Economic Co-operation in Paris, France. A report on this Conference was prepared and circulated to technical staff in Ottawa. A paper on moving amplitude adjustment was given by one member of the Division at the Americal Statistical Association Conference at Palo Alto, California.

PRICES DIVISION

The function of the Division is to collect and publish data on prices and on urban consumer expenditures. It consists of five sections: Retail Prices, Consumer Expenditure Surveys, Wholesale Prices, Farm Prices, and International Prices. The principal emphasis in the work program is on the construction and publication of price indexes but data on average prices are published for selected commodities. Surveys of urban consumer expenditure are conducted biennially to provide a basis for revising the item content and item weights in the Consumer Price Index. The resultant body of material on expenditures of Canadian families is published and is widely used by business organizations and welfare agencies.

A major revision of the Consumer Price Index was completed by the Retail Prices Section with publication in March of an occasional paper containing a complete description of the revised index and comparisons of the monthly movements of the old and new indexes for the period 1957-60. Regular publication of the index on the revised basis was begun in the March issue of the monthly publication *Price Movements* and the old index was discontinued. The primary purpose of the revision was to bring the items included in the index and their relative importance as represented by item weights into line with more current family spending habits as reported in the 1957 Urban Family Expenditure Survey. The items and weights in the index from 1949 to 1960 were based on family expenditures in 1947-48. The time base 1949=100 was

retained, however, and the revised index continues to measure current retail prices as a percentage of prices in 1949. An improved technique for use of seasonally changing weights for food was incorporated which will provide a better measurement of seasonal price movements. Indexes for traditional groups of items in the index, e.g., food, clothing, shelter, have been continued and supplementary indexes for new groups of items such as commodities, services, non-food, durables and non-durables, were also developed to facilitate analysis of retail price movements.

The Section also prepared and published an occasional paper on *Urban Retail Food Prices 1914-59* which provides a main reference document in this field. Analysis of special tabulations of urban rent statistics classified by rental characteristics such as number of rooms, facilities, and age of rental unit was completed in preparation for publication. Field training of prices representatives was continued and was of particular importance in extensive changes in items priced for the revised Consumer Price Index.

Two occasional papers containing full descriptions of methods, detailed tabulations and textual analysis of the 1957 family expenditure surveys were completed by the Consumer Expenditure Surveys Section and published, namely, *Urban Family Food Expenditure, 1957* and *City Expenditure, 1957*.

Field work on the 1959 survey of consumer expenditures was completed in May 1960. Editing has been completed and considerable progress made in the processing of expenditure schedules and analysis of survey response. The survey was larger and wider in scope than the surveys of 1953, 1955 and 1957. Usable expenditure records were collected from almost 2,000 families and individuals in 60 urban centres which were selected to represent all urban areas with populations of 15,000 and over, and will produce Canadian and regional averages of urban expenditure as well as averages for selected individual cities. The survey provides information on the spending habits of urban groups for whom expenditure data have not been collected since 1947-48, such as unattached individuals, low-income families, high-income families and large families, and will be a basis for review of the criteria which define the population group to which the Consumer Price Index relates.

The Wholesale Prices Section completed development of a new series of industrially classified price indexes relating to manufacturing industries. The indexes were introduced in an occasional paper entitled *Industry Selling Price Indexes, 1956-59* in which indexes for about 100 manufacturing industries were presented together with supporting descriptive text, charts and weighting diagrams. The new series was developed to supplement, but not replace, the long standing, commodity classified General Wholesale Index and its component series. This latter index relates to wholesale transactions in Canada regardless of the industry or country of origin of the commodity whereas the industry indexes relate to the total output of individual manufacturing industries in Canada and refer to a single and precise level of distribution. The dual system of commodity classified and industry classified indexes is designed to serve the increasing diversity of purposes of the growing number of users of wholesale price statistics which neither series alone could adequately satisfy. Progress has been made in revising the component commodity groups of the General Wholesale Index to conform with the new Standard Commodity Classi-

fication as a system of organizing and publishing statistics of commodities. The Section also has taken preliminary steps to produce a gross output price index for the mining industries and to develop gross input price indexes for the manufacturing industries.

In addition to indexes of prices of commodities and services used by farmers and prices of farm products at terminal markets, the Farm Prices Section produces indexes of prices of industrial materials, building materials and common and preferred stocks. The Section continued to co-operate with the Agriculture Division in further development of the tabulation program of the Farm Income and Expenditure Survey and in the checking of initial preliminary tabulations produced on the electronic computer. The tabulation program will provide basic data for revision of the Index of Commodities and Services Used by Farmers. A program of revision of the Index of Prices of Canadian Farm Products at Terminal Markets was brought close to completion. Progress was also made in development and construction of indexes for components of fixed capital formation, viz., machinery and equipment, provincial highway construction, and the construction of electric generation and transmission facilities.

Preliminary indexes of prices of machinery and equipment were completed for the period 1956-59 but publication was withheld pending confirmation of the representativeness and adequacy of the items included in the indexes and their relative importance. Further progress in development of price indexes of highway construction was achieved with continued analyses of cost and price data supplied by co-operating provinces and the construction of tentative indexes for several provinces. The Canadian Good Roads Association continued to provide technical assistance in this project. Substantial progress was made in the collection of construction cost data from public and private utilities covering specific electric generation and transmission projects completed during 1950-60. Tabulation of the data was begun to provide a basis for decision on the items of cost to be included in the index and their relative importance in construction of generating plants and facilities. Very able technical assistance was contributed by a senior engineer, provided by the Canadian Electrical Association, in developing schedules, arranging reporting procedures with utilities and advising on methods of handling data on engineering construction of this type.

During the year, the International Prices Section kept abreast of changes in living cost conditions being encountered by Canadian personnel serving abroad, both by means of detailed price surveys at numerous foreign cities and by assessing the impact of price and exchange rate movements on previous comparative living cost studies. Considerable progress was made towards the establishment of a series of foreign retail price indexes related to concurrent price conditions in Ottawa, as required in connection with impending changes in the Canadian foreign allowance system. The Section also continued to produce comparative food cost indexes for remote locations within Canada, and extended these studies to include a selection of non-food items at some of the larger communities.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

Data on a wide range of statistics covering the financial structure of the three levels of government in Canada, employment and payrolls of government, and the operations of transportation and public utilities are collected and published by the five sections which comprise the Public Finance and Transportation Division.

In addition to its regular publications, the Public Finance Section prepared a comprehensive report entitled *Comparative Statistics of Public Finance, 1956 to 1960* containing data on revenue, expenditure and debt on the three levels of government for the officials attending the Dominion-Provincial Fiscal Conference in July, 1960. Further improvements were made in the calculation of government revenue and expenditure on a quarterly basis for incorporation in the National Accounts and, in addition, an historical table covering the years 1950 to 1960, by quarters, unadjusted and seasonally adjusted, was prepared for inclusion in the report *National Accounts, Income and Expenditure, Fourth Quarter and Preliminary Annual, 1960*.

The annual report *Principal Taxes and Rates* was expanded to include the Yukon and Northwest Territories and arrangements were made with the Newfoundland government for collection of data on a quarterly basis. In order to encourage standardization of municipal finance reporting, a third edition of the manual has been prepared in both English and French for distribution through the provincial Departments of Municipal Affairs to all municipalities in Canada. Commencing with the quarter ended March 31, 1961, a sample survey of municipal receipts and payments was initiated. In addition, a municipal road and street expenditure survey for the year 1959 was conducted and the resulting data compiled.

Throughout the past year, the Government Employment and Payrolls Section of the Division was called upon to prepare special tabulations, 64 in number, on federal government employment for the Pay Research Bureau of the Civil Service Commission. In order to study federal government statistics, a committee comprising representatives of the Treasury Board, Pay Research Bureau and DBS was established. Discussions took place with the staff of the Civil Service Commission concerning improvements to forms and employee records. Efforts to reduce the time-lag between the event and the reporting of it in the monthly publication *Federal Government Employment* were effected. Preparations for the conversion of these statistics from a punch card record to the 705 computer were advanced and at the same time they were converted to the Standard Geographical Code used for manufacturing industries. A special annual survey of federal government employment in fifteen selected metropolitan areas was undertaken for the first time.

Provincial government employment statistics were revised in order to provide for a greater degree of comparability between federal and provincial governments and arrangements were made for the introduction of data from the Yukon Territory. In the fall of the year, a monthly survey of municipal government employment was introduced, beginning with large municipalities in nine provinces, and a complete survey of municipal government payrolls for the calendar year 1960 was also carried out.

The first report in a new monthly series *Gas Pipeline Transport*, containing financial, property and traffic statistics, was released during the year. This will be followed shortly by two annual publications entitled *Gas Distribution* and *Gas Bills*. Arrangements were completed with the provinces of British Columbia, Alberta, Saskatchewan and Ontario for the joint collection of monthly reports from gas distribution companies. Commencing in January, 1961, the Bureau undertook the distribution of the forms which incorporate the requirements of the provinces and DBS. Progress was made in the revision of the monthly report *Oil Pipeline Transport* and the January, 1961 report was the first on the revised basis.

A new report, *Inventory of Prime Mover and Electric Generating Equipment* was published in the past year. This survey will be repeated in 1961 and at five year intervals thereafter.

Arrangements were made with the Telecommunications and Electronics Branch of the Department of Transport and the Board of Broadcast Governors for joint collection procedures for reports from radio and television broadcasting stations to be instituted in connection with the 1961 survey.

A long term plan was initiated to improve transportation statistics to the point where comparability of data for the five modes of transport will be sufficient to justify the publication of a report containing data on the total Canadian transportation industry. Details of comparable tonnage of trailer-on-flat-car (piggyback) loading were submitted by railways. A breakdown of passenger revenues and traffic was obtained to show the extent of commuter and non-commuter services, thus consolidating commutation traffic with other urban transit data, and excluding rail commutation from intercity passenger traffic.

Owing to a sharp increase in interest in the operations of the St. Lawrence Seaway, the annual report on *Canal Statistics* was expanded to provide more detailed information as to port of loading and unloading, registry of vessel and type of cargo. In January, the revised Standard Commodity Classification was adopted for both the canal and shipping statistics series.

The monthly *Air Transport* report was revised as of January, 1961, and now provides more detailed information as to services performed by aircraft, as well as more complete financial statistics. Data on helicopter operations and specialty flying have been added and statistics for foreign carriers have been expanded to show the area of service. The Trans-Atlantic and Polar Air Passenger Survey was discontinued as of June 30, 1960; tabulations and analysis of the results are being completed this year.

A new quarterly report showing traffic statistics by commodity for private intercity and for-hire carriers has been printed. This should be of value in determining the major commodities carried by trucks on both long and short hauls. A revised *Classification of Financial Accounts of Motor Carriers of Freight in Canada* was completed and circulated to the major carriers. Estimated ton miles performed by various modes of transport for the period 1938 to 1959 were published for the first time and a new *Warehousing and Cartage* reporting form was designed for use in 1961.

SPECIAL SURVEYS DIVISION

The main functions of the Special Surveys Division are, through its eight Regional Offices, to obtain current information by sampling methods on population and housing by means of household interviews, and to carry out field work for other Divisions of DBS. The work at Head Office is organized in two sections, Field Administration and Processing and Analysis.

The monthly Labour Force Survey, which obtains information on population, labour force and related information, is one of the Division's main responsibilities. Trained enumerators visit a sample of households every month and the information elicited results in a monthly report *The Labour Force* which presents details of the employment situation for the country as a whole and for the six regions. At the same time, enumerators enquire about rents paid and facilities provided; this information is used to compile the rent component of the Consumer Price Index.

An annual interview survey is also conducted from which a report *Household Facilities and Equipment* is published. As the name implies, this is a study of the facilities and equipment present in Canadian homes. Other interview surveys are also carried out to obtain information on a variety of subjects such as income, assets, debts, family expenditures, adult education and immigration.

As part of their continuing duties, the Regional Offices collect data on retail prices of commodities for use in compiling the Consumer Price Index. They also maintain, for the convenience of local business firms and others, a file of all current DBS publications. The collection of business reports which other Divisions of DBS have not been able to obtain by mail is also carried out through these offices.

The Regional Offices are responsible for the field organization and supervision of the Decennial and Quinquennial Censuses of Canada. These responsibilities include the field testing of questionnaires and procedures, the interviewing of Census Commissioners, the supervision of field work, the processing of Census documents, and procedures to control and evaluate quality.

DATA PROCESSING SERVICES

In processing statistical data, the Dominion Bureau of Statistics has historically made extensive use of mechanical means of processing and has recently been assigned a large electronic computer. The IBM 705 computer located in the DBS will be used to serve the processing needs of a variety of government departments. Priorities in use of this computer will be assigned by the Interdepartmental Committee on Electronic Computers. Principal application of the computer to date has been assembling and testing programs required for tabulating the 1961 census information.

In addition to the present electronic equipment in the Data Processing Centre at DBS, an IBM 1401 computer is now on order and will be installed early in the new fiscal year; with its "on line" or "off line" availability, this new computer will be capable of working in conjunction with the 705 computer or independently.

For some time, the seasonal adjustment of time series has been accomplished by taking advantage of a service supplied by the United States Bureau of the Census involving their electronic computer in Washington. These calculations are now being made on the 705 computer in the Dominion Bureau of Statistics, and adjusted series are being provided for a number of departments and agencies of government.

The Electronic Data Processing System is composed of twenty-three pieces of equipment including a central processing unit and a unique Document-to-Tape Reader. The mark-sense principle, which was introduced for the 1951 Census, has been further developed for the 1961 national Census and will effect the transfer of the census data from marks on the field document to electronic tape. This electronic system is expected to speed up the tabulation of the census returns, to facilitate cross-classification, as well as to improve the quality of the statistics.

In order to handle its own applications, the Dominion Bureau of Statistics has a computer programming staff of twenty-two persons who, during the fiscal year, were largely engaged in preparing programs for the 1961 Census. The programming staff will increasingly become available to adapt other DBS statistical series to the computer. One of the continuing statistical series of magnitude to be first processed by the computer system will be external trade statistics. A planned transfer of certain other DBS series from mechanical to electronic processing is being considered.

A large part of the data gathered by the subject-matter divisions of the Bureau and which form the basis for statistical tables is processed using a variety of more conventional tabulating equipment. The greatest part of the work is done on punch card equipment. About 45 per cent of the staff of the Mechanical Tabulation Division records the data from the source documents onto punch cards; one group of operators punches the cards and a second group verifies, independently, the accuracy of the punching. Another 35 per cent of the staff operates other punch card equipment, such as sorters and tabulators, to group the punch cards by the various characteristics of the data and to produce in printed form the totals required.

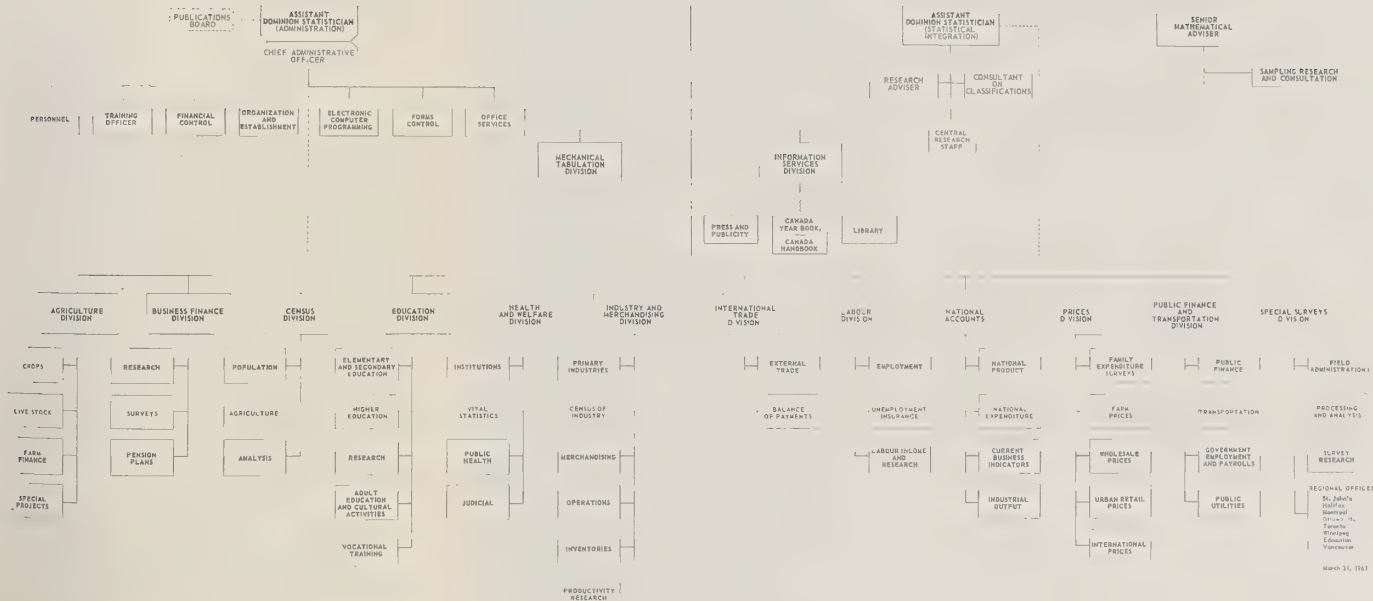
When only simple aggregates are required involving a minimum of cross-classification, these are produced directly by means of comptometers, desk calculators and peg-board methods of compilation. This group, about 15 per cent of the staff, handles a considerable volume particularly of data referring to the Census of Industry where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work. The remaining 5 per cent of the staff are engaged in day-to-day operation of the computer.

During the course of the year, as in the past, quite a number of projects were undertaken for other government departments and agencies on a cost reimbursement basis under individual agreements. Tabulation services for the

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION

DOMINION
STATISTICIAN

ASSISTANT TO THE
DOMINION STATISTICIAN



DOMINION BUREAU OF STATISTICS

Chart showing organization

March 31, 1961

Immigration Branch, Department of Citizenship and Immigration were continued. Considerable work was carried out for the Department of Labour, particularly in connection with surveys of wage rates and of members of scientific and technical professions. A special survey of the unemployed conducted by the Senate Committee studying employment and unemployment was tabulated. Atomic Energy of Canada and DBS co-operated in studies of family linkage of vital and health records; the Bureau prepared the punch cards and tabulations. In addition, DBS prepared tabulations which formed the basis for a number of tables in the Annual Report of the Department of Insurance. Extensive tabulations were prepared for the Pay Research Bureau of the Civil Service Commission relating to salaries and employee classifications.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general administration, staff organization, financial control, forms control and office services such as the addressograph unit, composing and drafting units, stenographic pool, supplies, mail and messenger service.

Renovations and additions to the building which were completed during the past year necessitated a great deal of planning as well as consultation with the Department of Public Works. In order to house the Data Processing Centre, extensive renovations to one wing of the first floor were required. In all, about 30,000 square feet of area was added to accommodate the computer and the increasing number of personnel.

Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel Section and the Establishment and Organization Officer who was appointed in the previous fiscal year. In addition, a full-time Training Officer was appointed during the past year who will be responsible for development of a training program specifically designed to meet the needs of DBS.

As at March 31, 1961, the regular staff numbered 1,875, an increase of 196 over the total at the same date in 1960. During the year 450 persons were recruited and 254 separated. The professional staff totalled 254, with 18 economists and statisticians recruited and 15 separated in the 1960-61 fiscal year. In addition to the regular staff, 22 research students were employed during the summer of 1960 and 218 promotional competitions were conducted throughout the year. Arrangements were completed with the Civil Service Commission to recruit some 2,700 temporary clerks across Canada to assist in processing the 1961 Census of Canada.

Financial Control

During 1960-61, the Accounts Section of the Administration Division and the Publications Distribution Unit of the Information Services Division were combined to establish the Financial Control Section of the Administration

Division. The functions of this Section are to administer generally the financial matters pertaining to the operation of DBS, such as the preparation of the annual estimates of funds required, the collection and transmission of revenue, the review, certification, documentation and approval of accounts for payment, and distribution of expenditures by divisions and regional offices.

Considerable additional work was required during the past year in preparation for the 1961 Census of Canada, such as preparing estimates of funds for this purpose, the drafting of instructions and forms for payment.

In addition to financial matters, the Publications Distribution Unit of this Section is responsible for the supply and distribution of the Bureau's publications.

Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications. In addition, necessary office layout studies relating to changes in the building were undertaken.

During the year under review, the Forms Control Section processed 2,945 forms consisting of 7,061 pages, excluding miscellaneous forms required for the 1961 Census. Of these, 847 pages were reprints, 5,005 were revisions and 1,209 new pages were designed. Envelopes numbering 216 were also reprinted, revised or redesigned. For use in the 1961 Census of Canada, 188 forms and questionnaires were processed totalling 2,205 pages of which 38 pages were reprints, 129 pages revised and 2,038 pages redesigned. In addition, 250 forms were processed in connection with the work of DBS but due to pressure of work in the Printing Unit within the Bureau had to be printed elsewhere.

Analytical study with a view to revising the arrangement of material on the Census of Industry schedules was initiated.

Office Services

In the Addressograph Unit of the Office Services Section, 10,137,000 forms were addressed for the various divisions of the Bureau during the fiscal year under review. In addition, 306,976 plates were embossed, 96,554 plates corrected and 370,981 plates deleted.

The Composing Unit planned, vari-typed and prepared for printing 14,413 pages of tabular and textual material. In addition, 8,212 hours were devoted to miscellaneous vari-typing of forms, an increase of 32 per cent over the previous year. Based on the current average of 1.5 hours per page, this represents a theoretical production of 5,475 pages of publication, bringing the Unit's total production to 19,888 pages.

The Drafting Unit completed 2,008 economic charts, maps, diagrams and various illustrations, in addition to the ruling of tables for the Composing Unit which totalled 7,067.

Outgoing mail numbering 21,021 bags, containing approximately 6,486,594 pieces, were deposited with the Post Office.

In addition to supplying stenographic and typing service to the various divisions of the Bureau, the Stenographic Pool provided members of the staff on a loan basis to divisions for 163 days. A total of 24,580 pages were typed of which 4,870 were plastiplate pages, 7,588 pages of photography, 10,461 pages of copywork, lists and letters and 1,661 pages of statements. Letters transcribed from dictation numbered 1,462. As well as the foregoing 50,158 forms, letters and envelopes were filled in and prepared for mailing.

The Supplies Sub-Unit received from the Department of Public Printing and Stationery materials for a value of \$602,720. Requisitions numbering 370 were completed for goods and services for which the Department of Public Works is responsible.



ANNUAL REPORT



Canada. Statistics, Bureau of

DOMINION BUREAU OF STATISTICS

For the Fiscal Year ended March 31, 1962

(Annual)
Report

CATALOGUE No.

11-201



CANADA

ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1962

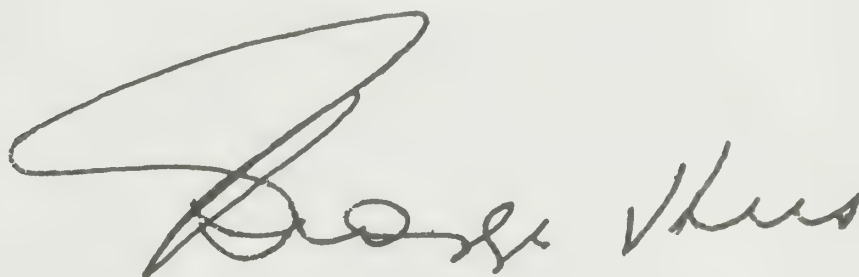
June, 1962
1101-502

Price 40 cents

*To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1962.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Lester Pearson". The signature is fluid and cursive, with a large, sweeping initial "L" and a long, horizontal stroke extending to the right.

Minister of Trade and Commerce

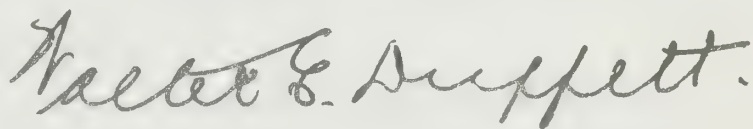
Ottawa, Canada
June, 1962.

THE HONOURABLE GEORGE HEES,
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1962.

Your obedient servant,

A handwritten signature in dark ink, reading "Walter G. Duffett." The signature is written in a cursive style with a large initial 'W' and a trailing flourish.

Dominion Statistician

Ottawa, Canada
June, 1962.

GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's activities in the Dominion Bureau of Statistics as well as certain operations closely associated with the office of the Dominion Statistician. Subsequent sections deal with the work of subject-matter and service divisions.

During the fiscal year, the largest single activity was the 1961 Census of Population, Housing and Agriculture. The Census of Merchandising and Services, based on lists of addresses secured in the population census, is concentrated mainly in the year 1962-63. The 1961 Census was preceded by several months of intensive preparation and by the training of some 1,350 commissioners who, in turn, trained and supervised some 32,000 enumerators. Enumeration commenced in most areas on June 1 and extended over some weeks, longer in rural areas. A large scale computer is being used to tabulate the census results, which are fed into the computer by an ingenious optical mark-sensing device. First results of the census were published early in March, 1962, and will continue to become available in detailed form into 1963. Negotiations have begun with a number of persons who may act as authors of a series of analytical monographs on Canadian economic and social life as measured by the Census.

While the computer has been largely occupied with census work, an increasing number of continuing DBS statistical series are being adapted to computer processing. This requires careful study by both subject-matter staff and programming staff. It is expected also that the computer will be utilized by other departments of government.

The integration functions of the Research and Development Staff, referred to in more detail below, continued with further development of uniform systems of classification. In co-operation with International Trade Division, export and import commodity classifications have been developed, conforming to the principles of the classification used for domestic commodities. The export classification is now in use and it is hoped that the import classification will be introduced in January, 1963. In the field of industrial classification a major development was the implementation of the new establishment definition in the 1961 Census of Industry. This represents a difficult task and is described more fully in the section on the Industry and Merchandising Division.

Growth in size and range of the Bureau's activities took place during the year in fields such as employment, commodity inventories, corporation finance, hospitals and judicial statistics. Associated with these new and expanded functions was a growth in staff establishment from 1,894 at the beginning of the year, to 1,955 at March 31, 1962. Notwithstanding these additional positions, much of the burden fell on older and more experienced staff and it becomes increasingly difficult for the Bureau to assume new duties as rapidly as they are assigned to the organization. The growing use of information for public and private decision-making, and the tendency to seek this information in the form of statistics, is a very encouraging development, but it is essential that quality and timeliness should not suffer in the process. Many of the developmental projects now under way in the Bureau are designed to improve quality but it remains most difficult, at least for the present, to preserve and improve timeliness.

Two changes of importance in DBS organization took place around the year-end. The former Information Services Division, which had performed both public relations and extensive editorial functions, became two divisions to be known respectively as the Canada Year Book, Handbook and Library Division, and the Information and Public Relations Division. At about the same time the Balance of Payments function of the International Trade Division was transferred, with the Director, to the National Accounts Division, which thereupon became known as the National Accounts and Balance of Payments Division. The remaining activities of the International Trade Division were recognized as a separate Division bearing the title External Trade Division.

Co-operative arrangements, informal and formal, continued with federal, provincial and municipal governments and with statistical bodies abroad. Canada is once again a member of the United Nations Statistical Commission, and participated in the usual biennial conference early in the new year.

This report would not be complete without mention of the continued contribution of the Bureau's competent and capable staff. Throughout the many and varied activities carried out by the Bureau, their loyalty and devotion to duty have been of vital importance in the accomplishments of the past year.

Sampling Research and Consultation Staff

This group, reporting to the Senior Mathematical Advisor, assists divisions in the design and analysis of sample surveys and in research in the field of sample surveys. During the year attention was given to coverage and quality checks of the 1961 Census and to other features of the Census. Consulting services were rendered also to other government departments.

Central Research and Development Staff

During the year members of the staff have been engaged in a variety of projects and participated in numerous divisional and interdivisional activities. A summary of main developments follows:

Continued progress is being made in implementing the revised Standard Industrial Classification. It is expected that all important series of statistics dealing with 1961 will be on the new basis. Allied with this work is the development of the Standard List of Establishments in which important progress has been made during the year. The list is virtually complete now in Mining, Manufacturing, Construction, Transportation and Public Utilities. In addition, wholesale and retail trade and the service industries have been reviewed but the final decisions will await returns from the 1961 Census of Distribution. Forestry will be reviewed on the basis of the 1961 returns for which a special schedule has been prepared.

Indexing of the Standard Commodity Classification and some amendment of it to take account of new developments has proceeded. The External Trade Section has been given assistance in its preparations for introducing a new Import Commodity Classification based on the Standard Commodity Classification. Commodity detail on Census of Industry schedules has been brought into line with the standard classification and work is progressing on a new commodity classification for transportation statistics based on the same framework.

The Occupational Classification prepared for the 1961 Census was published and it is now being used on all relevant DBS material. This classification was, of course, used in coding occupations on the 1961 Census.

The Working Committee on Geographical Classification has been meeting regularly throughout the year. This Committee has examined the geographic framework within which a large number of statistical series of the Bureau are released, and is attempting to develop a coding system for geographical entities which would be usable by all Divisions of the Bureau and which would enable the presentation of the maximum amount of data on a uniform area basis.

A report on the Distribution of Non-Farm Incomes in Canada, by Size, 1959, was prepared and will be released in April, 1962. Another survey of incomes for the year 1961 has been planned; the enumeration started in March, 1962. In addition to income statistics, this survey has been designed to collect data on labour force activity during the calendar year 1961. Much effort and time was devoted to the planning of the analysis of the income and some related information collected on a sample basis in conjunction with the 1961 Census of Canada.

Under the direction of the Interdepartmental Committee on Financial Statistics work proceeded on the development of quarterly financial data. Quarterly surveys of the balance sheets of non-financial corporations and certain financial intermediaries were started by the Business Finance Division in 1961; and preparations have been made to increase the information available in other areas. The Dominion Bureau of Statistics is working closely with the Royal Commission on Banking and Finance and a staff member has been appointed to serve as a central liaison. It is anticipated that both the Bureau and the Commission will benefit from this collaboration.

An important development in the field of energy statistics was the establishment of the Interdepartmental Advisory Committee on Energy Statistics, sponsored by the Bureau and the National Energy Board. In general terms, the committee is designed to provide suitable means at the federal level for resolving problems of adequacy, consistency, integration and interpretation of energy statistics and for minimizing duplication in reporting. It hopes to achieve these objectives through effective liaison not only between Federal Government departments and agencies but also with other committees active in the field of Canadian energy statistics.

Considerable time was devoted by other staff members to various statistical problems in the fields of housing, capital expenditures, capital stock, productivity, farm income and production, input-output and labour. Preparations were far advanced at the year end for the Third Dominion-Provincial Conference on Economic Statistics.

AGRICULTURE DIVISION

The Agriculture Division has the major responsibility in the development and co-ordination of an integrated program of agriculture statistics. Although much of the data related to the program is collected by a number of divisions

of the Dominion Bureau of Statistics, by provincial governments and the Federal Department of Agriculture, the Agriculture Division assembles such data for statistical analyses and publication in a number of reports.

The specific role of the Agriculture Division in collection of statistics is to undertake surveys (annual, monthly or seasonal) at the farm level for individual crops, the various kinds of livestock, as well as for farm prices and wage rates. It also conducts surveys at the manufacturing or wholesale level of production and stocks of a number of agricultural products. In the conduct of some of the farm and industry surveys, the Division co-operates directly with the provinces and other agencies.

Co-ordination of statistical work is facilitated by an annual Dominion-Provincial Conference on Agricultural Statistics, a Dominion Government Interdepartmental Committee, and several *ad hoc* interdivisional DBS committees. Close contact is also maintained with industry groups interested in agriculture and with farm organizations. The chief purposes of such co-ordination are to assess demands for statistical series, to determine methods of collection and the agencies best suited to do the collection, to avoid duplication in collection and to promote good public relations with both suppliers and users of agricultural statistics.

Although no major procedural changes were made in the work of the Crops Section during the year, an active program of research was undertaken to meet the demands for improved estimates and to develop techniques designed to reflect changing conditions and production patterns encountered in agriculture.

The pattern of potato production has undergone considerable change in recent years due to improved technology and shifts in market outlets. This has resulted in significant shifts in areas of commercial production as well as changes in farm organization. Studies were undertaken to describe these changes with particular reference to determining ways of introducing new sampling methods which would result in adequate production estimates. The first concrete result of these studies was the introduction of a survey of commercial potato producers in Alberta in the fall of 1961. Still pertaining to potatoes, but in a different field, the historical records of the crop correspondents from Prince Edward Island were analysed to provide information on premium rates for a proposed crop insurance scheme covering potatoes.

In the field of estimates, co-operation in the form of advice and analysis of data was extended to processor and grower associations and provincial authorities in a study to test the feasibility of a procedure to obtain yield estimates for tender tree fruits in the Niagara Peninsula. Actual counts and measurements are becoming an increasingly important technique in improving agricultural statistical output and the Crops Section continued to co-operate with the Quebec Bureau of Statistics in studying the methods of estimating the apple crop.

A new survey to obtain information on acreages of principal processing crops which canners intend to contract was instituted in January, 1962. In the fall of 1961 an exploratory survey was made to obtain information on the extent of commercial pollination in British Columbia.

There is an ever increasing demand for reliable small area data. Extensive study was given to testing the efficiency and reliability of various methods of expanding the sample results from the large, non-random June acreage survey, with the objective of improving not only provincial and national totals, but small area estimates as well.

The Crops Section maintained its extensive publication service during the year. As usual, much basic source material was derived from the results of mail questionnaire surveys of farm respondents who report regularly on items such as acreages, yields, farm prices and stocks of major field and special crops. Survey data were supplemented by material supplied by the Board of Grain Commissioners, the Canadian Wheat Board, Marketing Boards, private industry and other government departments. Data from all sources were integrated to provide a wide range of weekly, monthly, seasonal and annual statistics relative to production, marketing, processing and consumption of field and special crops. Analyses of the wheat and coarse grains situations are carried in the monthly *Wheat Review* and the *Coarse Grains Quarterly*. The section maintains extensive files of data pertaining to the production and disposition of cereal and oilseed crops and thus receives many requests for information and for special tabulations in addition to those contained in the regularly scheduled releases.

The Livestock and Animal Products Section issues quarterly reports on pig numbers and forecasts of farrowing intentions, semi-annual reports on numbers of other livestock and poultry on farms, and annual estimates of the production and domestic disappearance of meats and wool. Monthly and annual reports are published on output of dairy factory products, fluid milk sales, total milk production and utilization, egg production, and on stocks of food commodities held in storage. An annual census-type survey of fur farms is conducted in co-operation with provincial departments and provincial statistics on wild-life pelt production are assembled for annual reports on fur farms and total fur production.

Developments during the year under review included further investigation of fluid milk distribution in Alberta. A survey of several census enumeration areas was undertaken to test the possibility of getting more exact estimates of the incidence of small producer-distribution of raw milk. Field work was carried out by personnel of the Alberta Department of Agriculture. The pilot project was too limited in scope to yield conclusive results but provided useful guides for future extension of the project. Product coverage in the monthly survey of ice cream manufacturers was extended to include related products, *viz.*, milk shake mix, ice milk, sherbets and water ices. Co-operation of provincial officials in several provinces, with the Livestock and Animal Products section, has been stimulated by the increasing interest in uninspected slaughter of meat animals. This will insure an improved listing of all operators required to report in the quarterly livestock slaughter survey.

The Canadian Produce Council, at its 1961 annual meeting, agreed to request its provincial and regional affiliates to provide complete lists of all operators of storage facilities which normally, or at season's production peak, store poultry meat. This will ensure more accurate stock data for poultry meats. Efforts to maintain a balanced sample with respect to such criteria as size of

operation and geographical distribution are a continuing activity of the Section in co-operation with federal and provincial agencies, concerning monthly and other periodic farm surveys of dairy, egg, and hog production.

The Farm Finance Section prepares the Bureau's estimates of cash and net farm income, volume and value of farm production, farm prices of agricultural products, value of farm capital, value per acre of farm land and rates of wages paid to male hired farm help. It is also responsible for the distribution and compilation associated with the questionnaires used in connection with the semi-annual surveys of crop acreages and livestock numbers.

During the year, the Index of Farm Production was converted from a time and weight base of 1935-39 = 100 to a time base of 1949 = 100 and a weight base covering the five years 1947-51. At the same time, an index of farmer sales of agricultural products was constructed for the years 1947 to date. A pilot survey was launched in Alberta to obtain, direct from producers, information concerning the prices they receive from the sale of cattle and calves. This is in contrast to the present method which obtains price information from farmer correspondents regardless of whether or not they are producing the products for which they report. Studies were made of the average producer price per dozen for all eggs sold through egg grading stations in order to appraise the prices based on one representative egg grading station in each province and reported by the Department of Agriculture in its Poultry Market Report. An investigation was also made to determine the reason for differences between the prices received by producers for oats in the southern part of Alberta and the prices being offered by the Canadian Wheat Board.

Continuing study, through an interdivisional committee, was given to problems of the National Income Division which are associated with quarterly estimates of farm net income. These problems include estimates of quarterly changes in livestock inventories and the occurrence of negative net income during the first two quarters of the year when farmers' expenditures for new crop production may exceed farm cash income.

The Special Projects Section was engaged almost entirely during the year in work on the 1958 Farm Income and Expenditure Survey. Aside from this project, assistance was provided for the final revision of the schedule and enumeration manual, and for the training of field staff for the Quality Check of the 1961 Census of Agriculture. The Section was responsible also for the organization and co-ordination of activities required to produce the Farmer Mailing Lists from the 1961 Census of Agriculture which provide the basis for revising the samples of farmers required for many of the surveys conducted by the Agriculture Division.

The major portion of the data tabulations for general non-analytical tables was completed for the Farm Income and Expenditure Survey during the year. These tabulations consist of estimates of aggregates and averages for detail items reported in the schedule and derived summary items by provinces, without any classification by type or size of farm holdings and families. A second major group of tabulations, designated as analytical tables, contain only selected sets of derived summary items pertaining to the farm and the family. In these tabulations, the items are classified within provinces, by type, size and other characteristics of the farm holdings and families.

Most of the material for the first report of results from the Farm Income and Expenditure Survey has been assembled in draft form. Technical aspects of the survey are described in an introductory section under the general headings of sample design, estimation of aggregates, and reliability of the estimates. Tabular material in the first report is selected from data contained in Schedule A (Farm Business Expenditure and Income). It relates to all holdings enumerated in the survey (i.e., Census farms), and to the families associated with these holdings excluding managed holdings. These tables provide estimates of the number of farms reporting, and the aggregate for selected items pertaining to farm business operations and to family income from off-farm sources at provincial, regional and national levels.

BUSINESS FINANCE DIVISION

A large part of the work of this Division is centred around the collection and analysis of the financial statistics of business firms. Surveys of corporation profits and related data are conducted quarterly and the results are published about ten weeks after the end of each quarter. Estimates of capital and repair expenditures on construction and machinery and equipment are obtained three times each year from business, institutions and governments. Estimates of the expenditures of individuals for housing are also included in these surveys. One survey is conducted in the Fall of the year and obtains estimates for the current year and intentions for the year ahead. Each Spring estimates of actual expenditures for the previous year are collected and at mid-year a sample survey is undertaken to review the stated intentions of the previous Fall. Two reports are issued each year on the results of these surveys. One entitled *Private and Public Investment Outlook* is released in late February or early March and gives the outlook for that year, preliminary estimates for the previous year and final estimates for the year prior to that. The other report is *Private and Public Investment Mid-Year Review*; it is released in July each year and gives a re-assessment of the intentions stated the previous Fall for the current year.

The results of the profits and investment surveys provide the basic data for these items in the National Accounts and are widely used by business and government as key indicators of current and future developments in the economy. Investment in plant, equipment, housing, institutions and other facilities is of particular significance in Canada since over a fifth of the nation's expenditures are usually made for these purposes. The size and content of the intended investment program and its regional distribution provides a great deal of information on the support that may be given to general economic activity as a result of the direct demand generated for labour and materials during the construction period, along with the labour and material requirements for production in the newly created plants or other facilities.

In addition to the construction data provided in the investment reports which show expenditures on construction by industries, agencies, or organizations paying for the work done, there is another report entitled *Construction in Canada* which provides information on value of work put in place by type of structure along with overall estimates of labour and material content of this

work. The value of construction by type of structure is obtained in the capital expenditure or investment surveys. The labour and material content of these expenditures is obtained from ratios derived from surveys of construction contractors which are then applied to the total cost estimates taken from the investment surveys. Separate estimates are shown for the total value of work performed by construction contractors and the value of work performed by others engaged in construction work on their own account. The report containing this information is usually released in May of each year and includes estimates for a three-year period ending in the current year.

Monthly statistics on construction activity, as reflected by building permits data collected from over 1,000 municipalities in Canada, are published about six weeks after the close of each month in a report entitled *Building Permits*. This report contains information by provinces on the number and value of housing units by type, for which permits have been issued, along with value data as given on the permits for industrial, commercial, institutional and government building construction. These data are used extensively by business and government agencies, particularly those concerned with making estimates of the probable growth in demand for various types of gas and electric services, building materials and appliances, such as stoves and refrigerators.

A new quarterly survey of corporation assets, liabilities and net worth was started in 1961 to meet the need for information on the financing of corporation activity, their liquidity position and probable demand for funds. This work is a major undertaking and is part of a financial statistics program which is under the guidance of an Interdepartmental Committee on Financial Statistics which has representation from the Bank of Canada, the Departments of Finance and Trade and Commerce, the Central Mortgage and Housing Corporation and the Dominion Bureau of Statistics. Considerable support is also being provided to the Business Finance Division in this work by other Divisions of the Bureau including the Central Staff and the Balance of Payments Division and, as well, by outside business organizations. It is hoped that quarterly data may be made available towards the end of 1962 covering trust companies, mortgage loan companies, instalment finance companies and small loan companies. Quarterly data for non-financial corporations is not likely to be available in published form until 1963.

An annual survey of the financial aspects of trustee pension plans is conducted in July each year and the results of the survey are usually published about December of the same year. These surveys collect income and expenditure data for plans with fiscal years ending between July 1 of one year and June 30 of the following year. Data on assets as at the end of the plan year are also collected, showing holdings by type of assets, such as bonds, stocks, mortgages and real estate and investments in pooled or classified funds of a trust or investment company. Reports are obtained from employers having a trustee pension plan and from trust and investment companies on the investment of pooled funds. There are a variety of uses for the data collected. Pension payments of individuals form a part of forced savings as recorded in National Accounts. Trust and investment companies are able to follow developments in pooled funds. Earnings on investments are also shown. Government bodies are able to use the material made available as background in social security studies. In addition, the survey of the pension

area was expanded during the fiscal year to collect data on the non-financial aspects of all pension plans in operation in Canada, including underwritten as well as trustee plans. This expansion is designed to obtain selected information about the terms of the plans, such as eligibility, contribution formulae, the type of underwriter or trustee involved and cash option arrangements. The survey work was finished in February, 1962, and it is expected that the analysis and publication of data will be completed by July, 1962.

Two reports on research activity *Industrial Research-Development Expenditures in Canada* and *Federal Government Expenditures on Scientific Activities* are released in alternate years. Data are collected during the summer months on Research Expenditures made during the previous year and the report is usually available in the Fall. The Federal Government survey is undertaken for each fiscal year during the second quarter and the results are usually published in December. Both reports show expenditures by scientific fields and also provide information on the number of professional employees and their level of training. The Industrial report shows expenditures by industry group and the Government report provides similar information by Department.

Monthly reports are issued on the total value of cheques cashed in fifty-one clearing centres in Canada. These centres account for more than 80 per cent of all cheques cashed. Quarterly reports are issued on commercial failures in Canada on the basis of information supplied to the Bureau under the Provisions of the Bankruptcy and Winding-Up Acts. The number of failures and the liabilities incurred are reported by region by industry.

A continuous survey of new firms is conducted to assist various divisions of the Bureau in maintaining up-to-date coverage in various Bureau surveys. Efforts are made to cover all establishments in manufacturing and wholesale trade and those with fifteen or more employees in business. Co-operative arrangements exist with provincial governments whereby the results of these surveys are made available to them. The publication *New Manufacturing Establishments in Canada*, issued semi-annually, is based on results of this work.

The Division is responsible for constructing a standard list of establishments according to definitions set out in the most recent issue of the *Standard Industrial Classification Manual*. It is intended that this standard list be used, as the name implies, as the standard industrial classification of establishments throughout the various Divisions of the Bureau for the purpose of attaining comparability of coverage between one statistical series and another. By year-end, work was well advanced on this project. Most 1961 statistical series will be classified on this basis, where the establishment is the unit being classified.

CENSUS DIVISION

In the fiscal year under review, the staff of the Census Division was engaged primarily in completing a number of important stages in the planning, taking, and compiling of the 1961 Census of Canada.

To carry out this far-flung inquiry, and to reduce the results to usable form, required a large organization, the nucleus of which was the small

permanent staff of the Census Division. Three years previously, a Census Executive Committee had been created, into which were drawn other senior officers of the Bureau, in preparation for this undertaking.

The months of April and May, 1961, were taken up with such final preparations for the 1961 Census as field training, distribution of field and regional office supplies, and the final plans for the regional and head office organization for processing the census returns. A total of 15 supervisory personnel of the Census Division, along with 36 others from within the Bureau and Regional Offices, conducted 92 training classes in 46 centres across Canada; 1,350 Census Commissioners were instructed in the duties which they would later perform in appointing, training, and supervising some 32,000 enumerators who would carry out the actual house-to-house enumeration. Approximately 200 tons of field supplies were shipped for distribution to the Census Commissioners, enumerators, and to the Regional Offices.

The actual enumeration commenced, in most areas, on June 1, with representatives of the Regional Offices travelling throughout the provinces giving guidance to the Census Commissioners. Fifty-two per cent of the census returns were received in the DBS Regional Offices by the end of June and the remainder by the end of July, 1961.

The Dominion Bureau of Statistics received valuable assistance from other branches of the Government in the taking of the Census in areas which would otherwise be very difficult to reach. In isolated areas, such as Labrador, the northern parts of the Prairie Provinces and the Northwest Territories, the Royal Canadian Mounted Police were entirely responsible for taking the Census. For military personnel in Canada and abroad, the Department of National Defence carried out the enumeration. The Indian Affairs Branch of the Department of Citizenship and Immigration was responsible for the Indian population living on the reservations; the Department of Northern Affairs was responsible for the northern parts of New Quebec; while the Departments of External Affairs and Trade and Commerce counted Canadians serving diplomatic posts abroad.

In Labrador and the arctic region, census-taking began in the winter because of difficulties of terrain. In remote isolated areas, dog-sleds, snow-mobiles, boats, canoes and pack-horses had to be used. In a few instances, it was necessary to charter planes to reach areas not served by regular means of transportation.

An innovation in the 1961 Census was a Postal Check of census enumeration in the urban areas, consisting of a special card completed by the enumerator at the time each address was visited. These cards were turned in to the local Postmaster and sorted by letter-carriers who checked against known addresses on the postal route. The improvement in the census counts was borne out by the relatively few cases of complaints from municipalities that areas were under-enumerated.

Early in the planning stages for the 1961 Census, it was decided that the data would be processed on a large-scale electronic computer. Instead of using punch cards as in former years, the information was recorded on magnetic tape which is the required form in which material can be fed into the computer. The questionnaire used in the 1961 Census provided, after each question,

spaces which represented the various possible answers to the question. The enumerator made a mark in the appropriate space. A special machine, the only one of its kind in the world, read the marks on census documents by means of a battery of "electronic eyes" and recorded the pattern of the marks directly on magnetic tape. Each minute, this "document reader" transferred the records of 600 persons from document to tape and avoided the intermediary "punch-card step" used in 1951. The computer used to process these magnetic tapes is a standard large-scale machine. It examined each record to establish that it was complete and that the information was consistent within itself and with the records of other persons in the household. It then rearranged and summarized the data to produce the tabulated results of the Census. All of these operations are carried out at speeds not possible with other types of equipment—for example, the computer reads data at the rate of some 60,000 characters per second—and with numerous built-in checks for accuracy.

Initial processing of the Population, Housing and Merchandising census returns was carried out in the eight Regional Offices of the Bureau. The processing of the Census of Agriculture took place in three agriculture processing offices located at Cornwall, Ottawa and Winnipeg. This initial processing included checking each document and approving each enumerator's account for payment. In the case of population and housing, certain coding operations, such as occupation and industry codes, were required on the special "mark-sense" documents used in the enumeration. In the case of agriculture, coding was required as well as transfer of the information from conventional questionnaires to "mark-sense" type documents for later machine processing at head office on the "document reader". Regional processing lasted from about June to November, and at the peak period in July-August approximately 1,200 clerks were engaged in this work in the eight Regional Offices, and 500 in the three agriculture processing offices. Fourteen supervisory personnel of the Census Division were posted to these offices to direct the technical phases of these operations.

Following the completion of the regional processing, all census returns were forwarded to the Bureau for further checking prior to the tabulation of the information. This included electronic editing as well as further analysis and correction of documents shown to be in error in the editing process. At the peak period of these operations, at the close of 1961, approximately 500 clerks were engaged in Ottawa in these and other operations relating to the 1961 Census. Final tabulations of the census data got under way in March, 1962.

During the summer and early fall months of 1961, a series of five preliminary releases were issued giving provisional population counts for all incorporated cities, towns, villages, and municipalities across Canada. The first of these was released on July 28, and the fifth on October 6, 1961. The main purpose of these preliminary counts was to provide municipal authorities with an opportunity to comment on these figures before they were issued in final form. This enabled investigations to be made in the relatively few cases for which notices of disagreement were received.

On March 9, 1962, the final population count of the 1961 Census was announced for Canada as 18,238,247. Three advance reports were issued

before the end of March at the close of the fiscal year showing final population counts for: (1) electoral districts; (2) counties and census divisions; and (3) urban centres of 5,000 and over, including census metropolitan areas.

In the Census Analysis Section, the regular continuing series of annual population estimates and citizenship statistics were prepared and published. Compilations of post-war immigration and emigration data were brought up to date.

In order to produce information on movement of population in and out of metropolitan areas of Canada, Change of Address Forms from Family Allowance files are analyzed regularly. These are used for special estimates of population for the metropolitan areas.

In the Administration Section, some 46,000 applications for verification of age, using early census and National Registration Records, were received and processed during the year.

EDUCATION DIVISION

The primary task of the Education Division is to report on the education scene in Canada by collecting, compiling and publishing data on all levels of education and for all types of institutions. Co-ordinating provincial data for ten different provinces is basic to much of the work of the Division. Coverage, at present, includes public and private elementary and secondary schools, trade schools and technical institutes, colleges and universities, libraries and museums. A second, and rather time-consuming function of the Division, is to act as a clearing-house for education information.

Because the lines of demarkation between education and training, education and culture, education and health, are not clear-cut, co-operation is maintained with other Departments of Government which are interested in education. The Division co-operates with both Federal and Provincial Departments and Agencies, such national educational associations as the Canadian Education Association, the Association Canadienne des Édicateurs de Langue Française, the Canadian Teachers' Federation, the National Vocational Training Advisory Council, the Canadian Universities Foundation, the Canadian Association of University Business Officers, le fédération de collèges classique, the Canadian Library Association and the Canadian Association for Adult Education. In the international field the Division works with UNESCO and several American educational organizations. The need for data on education by these organizations has increased manifold during the past few years as the role of education is changing and expanding so rapidly.

At the higher education level, the administrative officials of universities and colleges are beginning to realize the need for more data and information as the pressure of numbers forces them into more stringent circumstances and greater demands are made from outside.

During the past year considerable emphasis has been switched to "education and manpower". This has been reflected in our work outside the Division and will be reflected in the publications of the Vocational Education and Adult Education Sections as well as in special publications, as soon as the

1961 Census data become available. In the field of Adult Education, interest in part-time education and evening classes is on the increase. *A Survey of Correspondence Education* covering Departments of Education, universities and private schools, was prepared and published for the first time.

The demand for research and development in the field of education, at the present time, far exceeds resources. It seems certain that more and more requests to consult with research and administrative officers of the national organizations will increase. Because of increased expenditures on education, demands for more accurate and greater detailed figures on education finance have been increasing year by year. During the past year, a Dominion-Provincial Conference on School Finance was convened and a Continuing Committee was set up to consider methods of reporting and to prepare a manual for secretary-treasurers of school districts. In September, 1961, the *Survey of Education Finance, 1957* was published and preparations for the 1958 survey are almost completed.

One of the highlights of the year in the work of the Division was the second Canadian Conference on Education held in Montreal in March, 1962. The Director and Section Chiefs assisted with the preparation of publications and leaflets on student potential, school finance, continuing education, and participated, as well, in a number of the assemblies. In addition, a publication entitled *A Graphic Presentation of Canadian Education* was prepared and distributed to all delegates and is now for sale by the Queen's Printer. The demand for this booklet exceeds any other publication prepared by the Education Division.

Officers of the Division also took part in the National Conference on Adult Education and the National Universities Federation Conference, "Canada's Universities in a New Age", as well as the School Trustees' Association Convention.

During the year the Elementary Secondary Education Section published *Salaries and Qualifications of Teachers, 1959-60 and 1960-61*; *Survey of Elementary and Secondary Education, 1958-59*; *Statistics of Private, Elementary and Secondary Schools, 1960-61*; and *Statistics of Schools for the Blind and Deaf, 1961-62*. The usual compilations were prepared for the Departments of Education of Newfoundland, Prince Edward Island and Nova Scotia for the school year 1960-61. The collection of information on enrolment at the beginning rather than the end of the school year continues. All provinces except British Columbia and Newfoundland have completed the change-over; Newfoundland will put this into effect in the fall of 1962.

A number of provinces are developing processing centres. Already Alberta, New Brunswick and Nova Scotia have arranged to receive sets of punched cards from DBS. As a corollary, this new interest will probably result in a re-examination of the forms used. In addition, the External Aid Office is using DBS data for comparative purposes for some of their teachers and the Pay Research Bureau of the Civil Service Commission have been using similar data for several years.

The 1961 Census required the assistance of two Section Chiefs of the Education Division, curtailing considerably the work of the Research Section and the Vocational Education Section. However, the first annual *Survey of*

Vocational Education and Training was published in December and a start was made on collecting data on enrolment and staff of private trade schools. In addition, the third edition of *Post Secondary Technical Institutes* was released during the year and the sample survey of *University Student Income and Expenditure* was conducted, the results of which are presently being compiled.

During the year, the Research Section prepared *Preliminary Statistics of Education for 1960-61* and *Formal Schooling and Income*, based on the Labour Force Survey, were released through the DBS Daily Bulletin of February 9, 1962.

In the Higher Education Section, *Awards for Graduate Study and Research, 1961*; *Salaries and Qualifications of Teachers in Universities and Colleges, 1960-61*, and *Canadian Institutions of Higher Education, 1960-61* were published and *Fall Enrolment in Universities and Colleges, 1961*; *Salaries and Qualifications of Teachers in Universities and Colleges, 1961-62* are presently being printed. Data, which will later appear in the *Survey of Higher Education*, covering university salaries, enrolment, graduate degrees and awards have been released through the Daily Bulletin. Data on salary schedules at Canadian universities were collected for the first time and distributed at the June meeting of the Canadian Association of University Teachers.

The Chief of the Higher Education Section spent three months in Tanganyika on a UNESCO posting as an expert in education statistics and also served on two National Committees, one on The History and Philosophy of Higher Education in Canada, and as advisor for the publication of *Canadian Universities and Colleges*.

In the Adult Education and Libraries Section the following publications were made available during the year: *Survey of Libraries, Part I, Public Libraries, 1959*; a preliminary release, *University and College Libraries, 1960-61*; *Survey of Libraries, Part II, Academic Libraries, 1959-60* and *Survey of Adult Education, 1958-59*. The Chief of the Section, as chairman of a group to co-ordinate statistics working with the Provincial Government Libraries Committee, reached agreement that DBS would print forms to be completed in duplicate, with one copy being sent to the provinces and the other to the Bureau.

In addition, during the year members of the Division have produced a number of booklets and articles in the field of education. Among these were: *On Determining the Seniority of Canadian Universities* by R.D. Mitchener, printed in the Dalhousie Review; *Skills for Tomorrow*, a 67-page booklet prepared for the Canadian Conference on Education, reporting on a trip of eight educators to Britain, Sweden, West Germany and France; *On Maintaining Standards*, an article for W.J. Gage Limited; *Is Research in Education Lagging?* first printed in the Ontario Research Journal but later reprinted for the Canadian Conference on Education Study Guides; and a number of articles published in the School Guidance Worker and School Progress.

HEALTH AND WELFARE DIVISION

To do its part in carrying out the statutory functions of the Bureau, the Health and Welfare Division assumes responsibility for statistics concerned with the health of the Canadian people, the enforcement of the law and the administration of justice. Three sections carry out the health statistics program: the Vital Statistics Section produces national and provincial statistics of births, deaths, stillbirths, marriages, along with special analyses of mortality, fertility and life expectancy; the Institutions Section collects data regarding the services, facilities and finances of general and special hospitals; the Public Health Section collects information on illness and health care, including in this process the collection of information on the condition and characteristics of patients in mental and tuberculosis hospitals. This latter function was transferred in this past year to the Public Health Section from the Institutions Section which is still, however, responsible for obtaining detailed administrative and financial reports from sanatoria and mental hospitals. The transfer to the Public Health Section of the responsibility for collecting data on the condition of mental and tubercular patients coincided with the assumption by that Section of responsibility for any program development relating to the recording of the morbidity experience of patients in active treatment hospitals. The Judicial Section produces judicial and criminal statistics; these are based on returns received from the police, from courts and from correctional institutions.

During the year regular weekly returns on the incidence of notifiable diseases were released for the benefit of public health authorities. In the winter months, data on influenza and other upper respiratory infections were specially assembled, in order to assist public health authorities evaluate the need for immunization measures. Revised weekly figures were incorporated in an annual publication. Two notifiable diseases, poliomyelitis and infectious hepatitis, were the subjects of individual reports. Weekly summaries from the provinces have been the source records for notifiable diseases. At the beginning of the year 1962, the Province of Alberta began supplying individual returns for all notifiable diseases except those involving venereal infections. Since that date a series of weekly and four-weekly tabulations have been sent to Alberta. It is expected that this pilot project will be valuable in determining the feasibility and utility of introducing individual case reporting on a national scale. The individual reports from Alberta provide a good deal more information than was available previously from the weekly summaries.

A new system that operates in conjunction with provincially maintained registers of known active, reactivated and inactive cases of tuberculosis, was established in 1961. A monthly report, *Incidence of Tuberculosis*, is derived from this system. Tuberculosis notifications were formerly a part of the general notifiable disease returns.

The regular reports on tuberculosis and mental statistics were issued during the year, as were also the reports of certified illness in Federal Civil Service and of the health care activities of the Victorian Order of Nurses. The work of the 1950-51 Sickness Survey was continued with the publication of three occasional papers on topics not considered of general enough interest to be included in the previously published comprehensive report *Illness and Health Care in Canada*.

In the new field of general hospital morbidity statistics the Division took part in the deliberations of Dominion-Provincial committees concerned with the standardization of hospital morbidity definitions and concepts. It also planned for a program of national hospital morbidity statistics and, at the request of the Royal Commission on Health Services, commenced processing two million punched cards representing the 1960 hospital morbidity experience of eight provinces. Besides this particular new development the Health Statistics Program Development Committee of the Bureau has been carrying out research on behalf of the Division into the whole future of morbidity statistics.

The annual hospital returns were not received as early as expected. In an attempt to improve matters, a field edit was carried out as an experiment in one province. It proved so successful that steps are now being taken to carry out such field edits on the 1961 returns.

The decision to carry out the processing of the 1961 annual returns of hospitals on the computer has been a far-reaching one. It will now be practical to go beyond the provision of simple national and provincial totals and to produce a large number of ratios for hospitals grouped by size and type. These ratios will constitute a comprehensive set of measures of workload, utilization, staffing, quality of care, costs, and other aspects of hospital activities.

Reporting schedules for mental institutions and tuberculosis sanatoria were revised slightly in 1961 and further revisions are under consideration for 1962, with the end in view of making these returns more nearly comparable than they now are with the annual hospital returns referred to above.

In addition to the publication of the regular reports on vital statistics, basic tabulations were provided to the provinces under Dominion-Provincial agreements. From medical, public health, market research and other areas has come an increasing volume of demands for more detailed information of current and historical vital statistics. To meet this demand a number of special reports were issued on accident fatalities and life expectancy, while several others on mortality from cancer and from heart disease, as well as on life expectancy trends, were initiated.

On behalf of the provinces and of the Family Allowance Administration, the Division compiles numerical and alphabetical registers of births, deaths and marriages. In order to make more resources available for statistical purposes, negotiations are under way with the agencies concerned with a view to curtailing this feature of the Division's work. This matter, as well as a variety of subjects related to the registration of demographic records and the production of statistics based on them, was discussed by the Vital Statistics Council of Canada at its regular annual meeting at which, as usual, DBS supplied the secretariat services. The Council referred a number of items to the Division for disposition.

In order to help advance the publication date of the national vital statistics, certain modifications were effected in the processing procedures, while still others are being examined and tested. In order to enlarge the scope and ensure the completeness of the figures, several special tabulations were undertaken to coincide with the 1961 Census period. Certain standard tabulations were enlarged to meet increased demands for detailed data, while a review was initiated of the usefulness of other regularly produced tabulations.

The developmental program covering statistics of crime and correction was continued. One result of this program was the introduction, on January 1, 1962, of the Uniform Crime Reporting System. Divisional officers conferred with a Committee specially set up by the Canadian Association of Chiefs of Police, as well as with police departments in Canada, in order to determine the statistical requirements of such a system. The next step was to prepare forms designed to give the required information on police administration, on crime, and on the enforcement of traffic laws. A *Uniform Crime Reporting Manual* describing the operation of the new System, was prepared by officers of the Division. The CACP Committee on Uniform Recording of Police Activities met in April, 1961, at the Dominion Bureau of Statistics and approved, in principle, the new System. The System was then officially adopted by the CACP at their annual convention at Halifax in September of 1961. Under the operation of the new System, data are reported to the Bureau by municipal police forces, by the Ontario Provincial and the Quebec Provincial Police, by the RCMP in the other provinces, by the Railway and by the National Harbours Board Police. In order to process these returns efficiently a new control and editing procedure was devised and implemented.

Divisional officers attended the conference of the Chief Constables' Association of Ontario to discuss the Uniform Crime Reporting System and also the 1961 Seminar of the Ontario Chiefs and Deputy Chiefs of Police held at McMaster University to conduct studies in the Uniform Crime Reporting program.

During the year, the annual report on Police Statistics was changed to three separate publications: *Police Administration*, *Crime Statistics* and *Traffic Enforcement Statistics*. The 1960 annual reports on these subjects were published and the 1961 *Police Administration Report* was prepared for printing. The 1959 annual reports on *Juvenile Delinquents* and on *Statistics of Criminal and Other Offences* were published and the 1960 *Juvenile Delinquents Report* was also prepared for printing. The statistical supplement to the Annual Report of the Commissioner of Penitentiaries for 1961 was revised in consultation with the Commissioner.

During the year, requirements for correctional institution statistics were studied in consultation with correctional administrators and with Committees of the Canadian Corrections' Association. Preliminary discussions were conducted with the Commissioner and with penitentiary officers concerning a revision of the forms and procedures for reporting penitentiary population data to DBS. Out of these discussions were developed new draft returns. Conferences were held at Penitentiary Service Headquarters in Ottawa and at the Staff College in Kingston with administrators and classification officers to consider the proposed forms. On the basis of these discussions, the new forms and reporting manual were prepared in final draft stage. Arrangements for the start of the new statistical reporting system on April 1, 1962, were completed.

Drafts of reporting forms and a reference manual were prepared for delegates to a Dominion-Provincial Conference on Training School Statistics held at the Bureau in October, 1961. All provinces operating training schools for juveniles were represented. Agreements were reached regarding the reporting of statistics on the populations of training schools as well as on the type and content of the forms to be used. Arrangements were made for the inauguration of the training school reporting system on July 1, 1962.

The first publication of a series entitled *Correctional Institution Statistics* was released covering the years 1957 to 1959. Formerly the data for juvenile and adult correctional institution populations appeared as a section of the publication *Statistics of Criminal and Other Offences*. The second edition, for the years 1960 and 1961, was prepared for printing.

In the area of parole statistics, discussions were held with National Parole Board officials regarding arrangements for the reporting of these data to DBS, as well as for their processing. Parole Statistics were prepared for inclusion in the 1961 annual report of the National Parole Board.

INDUSTRY AND MERCHANDISING DIVISION

The Industry and Merchandising Division is responsible for statistics in two broad fields of activity: (1) *Industry*, comprising logging, fishing, mining and manufacturing; and (2) *Merchandising and Services*, comprising retailing, wholesaling, and the service trades. Statistics on these and related activities are widely used by governments and business, in making administrative and policy decisions, in keeping informed on business trends, in appraising markets, in planning capital expenditures and in many other ways. A comprehensive industrial census is carried out each year, and more current data on important commodities and on total manufacturers' shipments and inventories are provided by appropriate monthly or quarterly surveys. Similarly, a complete census of the merchandising and service trades is made every tenth year, and current estimates of sales and inventories, in total and for important trades, are provided by monthly and annual sample-type surveys.

A major divisional project during the past year was the implementation of the new "establishment" definition in preparation for the 1961 Census of Industry. Briefly this new concept demands coverage of all activities of the establishment in a single report and the classification of the report in total to the major-activity industry, whereas former practice attempted to procure separate reports for manufacturing activity and in some cases by major class of products, this resulting very often in arbitrary breakdowns. The "establishment" is now defined as the smallest unit which is a separate operating entity capable of reporting all elements of basic industrial statistics. Accordingly, the 1961 questionnaires (long, medium and short forms), were designed to conform more closely than heretofore with general accounting practices. As a result of these changes, more than 1,000 former reporting units were either dropped from the census list or were combined with others. In order, however, to maintain coverage of commodity data a number of these units were asked to submit figures for products only on a special commodity schedule.

In this project the large multi-unit companies engaged in activities which cut across industry lines presented special problems. Information on the nature and detail of accounting records had to be obtained in order to determine the number and content of reporting units. The necessary information was procured through correspondence, telephone calls and company visits by officers of the Division. Although a number of problem cases remain, solutions have been found for the more difficult. Changes in the number and nature of

company reporting units are being incorporated in the Bureau's Standard List of Establishments. The Manufactures Section of the Industry and Merchandising Division is acting as a focal point in the investigation and study of problems relating to classification and establishment reporting of all firms engaged in manufacturing operations.

In order to effect the change-over to this new establishment concept, with as little disruption as possible in the continuity of manufacturing statistics, an "historical statistics" unit was established. The function of this unit is to re-assemble principal statistics for a number of back years on the same basis as 1961 by utilizing data from existing Bureau records or, for some items of non-manufacturing activity, developing special estimation procedures.

Another major assignment involved final preparations for the 1961 Census of Merchandising and Service Establishments. Field enumeration of retail, wholesale and service places of business was carried out by the Census of Population enumerators in June, 1961; about 300,000 such establishments were identified and sufficient information recorded for classification by kind of business and type of report form to be completed. Following intensive quality checks on enumeration, mailing lists were set up for the various trades and forms were prepared for mailing promptly after the close of the calendar year. A 'short' form was designed for approximately 100,000 retail and service establishments with less than three employees. For the first time the entire mailing operation was done mechanically with punch-card equipment being used for addressing the outgoing forms. At the end of March, 1962, about 47 per cent of respondents replied, and the checking of completed reports was in full swing. To supplement this census of establishments, special surveys were developed to cover other sales to households or to consumers, such as door-to-door selling, sales through vending machines, and sales of newspapers by mail or carrier delivery. Also related to the merchandising census, plans were completed for a survey for 1961 of manufacturers' channels of distribution, which numbered about 30,000 respondents.

In productivity statistics it was possible to speed up the editing and compilation of man-hours data from 1956 to date by individual manufacturing industries, and analytical work was started to refine and adapt concepts and methods of calculating matching output indexes. The pilot study aimed at developing and testing the methods to be used in industry productivity measurement was continued. A start was also made on the development of global productivity measures to indicate productivity trends in the private economy since 1947. During the year, this work consisted mainly of integrating and refining employment and man-hours data from the Labour Force Survey, Employment Survey, Census of Industry and various other sources. As the various projects in the productivity research program become completed and their results analyzed, it will be possible to assess the statistical adequacy of data, and determine at what level of detail they can be released for general publication.

In addition to the above recent developments, all regular surveys were maintained. The 1960 Census of Manufactures, embodying changes because of the introduction of the revised Standard Industrial Classification, was near completion at the year-end. The 1960 Census of Mines was, however, several

weeks behind schedule because of the illness of key staff members. Coverage in the annual Census of Logging Operations was extended considerably, and substantial progress was made in the improvement and extension of the annual sample surveys on the cut of forest products from privately-owned woodlands. A Census of Farm Woodlots covering the cut of forest products from farms in the calendar year 1960 was taken in conjunction with the Decennial Census of Population which included about 138,000 farms. There were no significant changes in fisheries statistics. The 65 monthly or quarterly reports on important commodities or trades, covering about 500 items, were issued regularly.

To meet the needs of the Emergency Supply Branch, Department of Defence Production, a special unit was set up in the Division to collect and compile figures on stocks of commodities considered to be critical in the event of a national crisis. This unit now carries out 30 regular surveys on commodities or groups of commodities, mostly on a quarterly basis. Data are compiled by locations and every effort is made to make as much use as possible of the established DBS surveys. Existing surveys refer to foods, beverages and clothing but extensions to other commodity fields will be undertaken as soon as possible.

A special committee has been set up to study inter-censal needs in the fields of merchandising services.

INFORMATION SERVICES DIVISION

This Division, during the fiscal year under review, served as the focal point for the release and dissemination of the published information of the Dominion Bureau of Statistics and produced two official compendia of information on the Canadian economy. In performing these functions, it compiled and published the *Canada Year Book*, the *Official Handbook Canada*, the *DBS Daily and Weekly Bulletins* and the Bureau's catalogue of *Current Publications*, the latter in co-operation with the Department of Public Printing and Stationery. In addition, it maintained a suitably stocked library for statistical research and study, and answers general inquiries.

Specific examples in the sphere of public relations were the preparation of exhibition and conference display material promoting DBS services, in conjunction with those of the Department of Trade and Commerce, at the Canadian National Exhibition (Toronto), the Montreal Trade Fair, and the Second Canadian Conference on Education. Numerous national business, trade and cultural organizations were approached with a view to accepting specially designed DBS display material for their annual conferences during 1962 and their initial responses proved exceptionally enthusiastic.

The program of work of the Canada Year Book Section, concerned with the editing and production of both English and French language editions of the 1300-page *Canada Year Book* and the 320-page illustrated handbook *Canada*, included the expediting of the publication schedules and the bringing out both language editions. Considerable progress was made in advancing the publication dates of both volumes.

The functions of the Press and Publicity Section are to publicize the Bureau's services and obtain the most effective distribution of DBS material. It produces the *DBS Daily* and *Weekly Bulletins* which serve to release and to summarize each day's and week's publications; it replies to a large number of inquiries requiring the assembling of published statistical material from a variety of sources or special investigation and it prepares conference display material promoting DBS services. In addition, it publishes, in co-operation with the Department of Public Printing and Stationery, the annual DBS catalogue of *Current Publications*. During the year the 1962 *Supplement to the 1960 edition of Current Publications* was produced as well as a first list of *DBS Publications of the 1961 Census of Canada*.

In its capacity as a focal inquiry centre, the Division provides the latest Canadian statistical material regularly to a score of national and international year books, almanacs, and booklets, including the United Nations Statistical and Demographic Year Books.

The DBS Library maintains a large stock of books, periodicals, documents and reports for the use of the staff and research workers. In addition to the basic book collection, it has an extensive collection of statistical publications received on an exchange basis from nearly all countries of the world. The Library's resources are used not only by Government departments and business firms, but also to service numerous inter-library loan requests from libraries in the United States and Canada as a result of DBS library holdings being reported in the Union Catalogue and publications of Canada's National Library.

The publication of the *Historical Catalogue of DBS Publications* has now been approved and final arrangement of the material preparatory to printing is being made. This arrangement includes the expansion of the present classification used for the DBS catalogue of *Current Publications* so that it can be used in the organization of a complete collection of DBS publications.

At the close of the fiscal year 1961 - 62, in recognition of the importance of the separate functions covered by the Information Services Division, two Divisions were created, namely: Canada Year Book, Handbook and Library Division and the Information and Public Relations Division.

INTERNATIONAL TRADE DIVISION

The field of statistical information with which the International Trade Division has been concerned covers a wide range of economic and financial transactions between Canada and other countries. It was composed of two main sections, one dealing with external commodity trade and the other, balance of payments investment position and international travel. The statistics are in demand by a broad group of users in both the business world and governments, being used for a great variety of purposes, including economic and financial analysis, market studies, and commercial relations.

The new Export Commodity Classification introduced in January, 1961, has proven to be a considerable improvement over that formerly in use. The main commodities in Canadian trade are more clearly delineated and the size of "basket" or "not elsewhere specified" classes has been greatly reduced. The accuracy of commodity classification in export statistics has also been considerably improved. The timeliness of export statistics was seriously affected by the introduction of the new classification and the combination of an increasing number of export shipments with an unusual level of staff turnover created difficulties in restoring the timeliness of export reports. By the end of the year steady progress was being made in reducing work backlogs.

Preparations for the introduction of the new Import Commodity Classification in January, 1963, were considerably advanced during the year, and a start was made on training staff in the use of the new classification and in developing and improving the necessary coding manuals. A number of commodity classes extracted from the new classification were introduced in import statistics as of January, 1962, and this action is expected to reduce the difficulties encountered when the full framework of the new classification is introduced in 1963. Also in January, 1962, import tabulations were transferred from conventional punch-card equipment to the new computer and it is hoped that this action will eliminate some of the delays in producing import statistics which were encountered during 1960 and 1961.

Following the decline in the exchange value of the Canadian dollar, it became evident that some values used in statistics of Canadian exports were less reliable than had formerly been believed. A significant, but indeterminate, number of the values used in these statistics are, in fact, being reported in a currency other than Canadian dollars. It may take some time to develop a satisfactory solution to this problem.

With the introduction of new official economic policies in 1961, close attention was drawn to shorter term changes in Canada's balance of payments. This led to increased interest in the statistical measurements of balance of payments changes. In meeting this interest more frequent reviews of the background balance of payments have been necessary and development work has been undertaken with the object of improving statistical data for this purpose. Toward this end progress was made in establishing new arrangements for obtaining banking statistics required for the capital account of the balance of payments. The resulting improvements in banking statistics made possible a detailed presentation on a quarterly basis of the item, "Other Capital Movements" formerly published separately.

The annual report, *The Canadian Balance of International Payments*, was again used to present special features of the statistics which may not be published each year. Among new features of the annual report for 1960 published in this period was an analysis by countries of the large item "Miscellaneous Current Transactions", further detail relating to earnings of foreign investments in the financial category, and further presentations of investment data relating to foreign ownership and control.

The new procedure for dealing with non-resident automobile movements into Canada introduced late in 1959 and covering a major sector of travel became fully assimilated in work procedures during the year. Timing and comparability of publications covering *Travel Between Canada And the United States* were reinstated in 1961.

With the purpose of improving information on overseas travel to Canada a new arrangement for the sampling of travellers from overseas was introduced during the year. This was conducted with the co-operation of the Department of Citizenship and Immigration which arranged for the distribution of the new questionnaire to a number of incoming visitors to Canada from overseas. As a result a more solid basis for estimates of this group of non-resident travel expenditures in Canada became possible, with also useful ancilliary travel information, including purpose of visit and length of visit. In the opposite direction, however, there was a temporary deterioration during the year in the record maintained at ports covering the number of visitors from overseas resulting from simplification procedures introduced in documenting international overseas travel. During the year steps were taken designed to overcome the deficiencies in records and the introduction of a new system during the coming fiscal year is anticipated.

LABOUR DIVISION

This Division is concerned primarily with industrial payroll statistics and with the operational statistics of the Unemployment Insurance Commission. The staff of the Division is divided into three sections. The Employment Section collects payroll records of employment, hours of work and wages and salaries; it publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The employment index numbers are widely used for industry and area analysis of employment changes. Per capita data on earnings and hours of work serve a number of purposes, but are used most frequently in collective bargaining between labour and management. The Unemployment Insurance Section provides the Unemployment Insurance Commission with operational statistics; it also publishes statistics of public interest concerned with unemployment insurance claims and amounts of benefits received by beneficiaries. The Labour Income and Research Section issues labour income estimates, and undertakes research and analysis in the general field of labour statistics.

In addition to its regular operations, the Employment Section was engaged in two major projects during the year. The first of these was a sample survey of employment in small firms to round out statistics of business employment. The Section also continued work on a revision program involving adoption of the 1960 Standard Industrial Classification, application of a standard definition of the term "business establishment", and adoption of a new 1961 base period for index numbers of employment and payrolls.

The number of respondents in the monthly survey to produce employment index numbers and per capita data on earnings and hours of work increased by approximately 6 per cent during the year. A computer program to be used in the production of these statistics has been completed and should be in

operation in 1962. The computer will take over the final stages of data processing; it will facilitate production of industry and area detail, and make computations formerly done on conventional calculating machines. A large number of seasonally adjusted employment index number series was made available during the year to government departments for analytical purposes.

During 1961 a monthly sample survey of employment in approximately 23,000 small firms was initiated. Lack of information regarding employment in small firms has been the main obstacle in the way of producing employment estimates for major industries within individual provinces. The sample data are being combined with data from other surveys to produce estimates of total employment. These estimates will be published after the sample data have been carefully tested.

The revision program will utilize the computer in completely reworking monthly statistics of employment, earnings and hours of work from the beginning of 1957. The computer makes it possible to build up a new record for this period, incorporating changes resulting from the revised industry and area classifications. Progress has been made during the year with the new classification frameworks, and in preparing the groundwork for historical tabulations. Completion of this work will be related to progress with the Standard Establishment List for all industry divisions.

The Unemployment Insurance Section continued its regular program of preparing statistics used by the Unemployment Insurance Commission, the Department of Insurance and the Unemployment Insurance Advisory Committee. In addition it participated in a number of major co-operative projects and undertook several special studies. The Section's coding staff did the industry coding of approximately 90,000 industrial establishments for a list which was used for classifying employees enumerated in the 1961 Decennial Census. This operation required a considerable amount of overtime. Senior members of the Section staff participated in plans for the transfer of the UIC Employer Index of close to 400,000 establishments to punched cards. This will involve the section in supervising the matching and industry coding operations.

New provincial statistics on the industrial distribution of monthly additions to insured unemployment have been added to the monthly *Statistical Report on Operations of the Unemployment Insurance Commission*. These have been designed to give information on the industrial and geographical sources of new unemployment. Special studies are in progress regarding the prevalence and the characteristics of claimants who establish claims in successive years (repeaters), and on the characteristics of claimants who draw benefit steadily for relatively long periods of time. Finally, a special effort is being made to improve 1962 records of the insured population, with the object of producing local area statistics.

The Labour Income and Research Section contributed a great deal to the developmental work on the sample survey of employment in small firms. It prepared the sample design and did experimental work on the preparation of estimates incorporating sample data with data from other surveys. A special study was made of the quality of data used in labour income estimates. The Section designed and supervised the preparation of data for a labour mobility study, the results of which were published in the Canadian Statistical Review.

NATIONAL ACCOUNTS DIVISION

The National Accounts Division carries responsibility for preparing and analysing major sets of economic statistics such as the National Accounts and the Index of Industrial Production. These data are widely used as comprehensive measures of economic activity by government departments, the business community, and the general public. The Division is also responsible for publishing the *Canadian Statistical Review*, a compendium of the most important monthly or quarterly economic indicators, as well as for preparing the articles contained therein.

The Division's work is organized into four sections: the National Product Section, the National Expenditure Section, the Industrial Output Section, and the Current Business Indicators Section. The National Product and National Expenditure Sections together prepare the regular quarterly and annual National Accounts reports, reviewing current economic conditions in terms of the major national income and expenditure flows. The Industrial Output Section publishes the monthly *Index of Industrial Production*, a widely used economic indicator, covering output in the manufacturing, mining, and utilities industries; this section also publishes the annual *Survey of Production*, which shows census value-added in the goods-producing industries by provinces. The Current Business Indicators Section is responsible for the preparation and publication of the *Canadian Statistical Review*, and for the program of seasonal adjustment of economic time series.

The regular quarterly National Accounts reports, reviewing current economic developments during 1961, continued to be prepared and published on schedule. The annual National Accounts report for the year 1960, containing details of the main aggregates and supplementary tables, was released at mid-year.

The quarterly National Accounts were expanded by the addition of seasonally adjusted constant dollar data. Changes in the value of Gross National Expenditure arise from variations in both quantities and in prices. The constant dollar estimates are designed to remove the effect of price changes from the value data and thus to facilitate an understanding of movements in real production and changes in the direction and rate of growth of real consumption and investment.

The monthly Index of Industrial Production continued to be released throughout the year. Until fairly recently, the monthly Index of Industrial Production was released in the *Canadian Statistical Review* only. The latter publication will continue to carry the index, but in addition, commencing in October, 1961, the index has been released as a separate monthly publication. This step has made it possible to release the component industry detail of the index several weeks earlier, thus improving the usefulness of this material significantly.

One or more articles dealing with current economic conditions or some new phase of the Bureau's statistical activities were prepared for release in each monthly issue of the *Canadian Statistical Review*. An article, *Recent Developments in the Work of the Dominion Bureau of Statistics*, was prepared for publication in the *Canadian Journal of Economics and Political Science*.

The number of seasonally adjusted time series carried in the *Canadian Statistical Review* was again expanded during the year and approximately 60 new seasonally adjusted series were published in the *Review*. These include, among others, data on exports, imports, employment indexes by industry, and corporation profits by industry. Progress was also made in improving the quality of the already published seasonally adjusted series. An improved adjustment for the Easter holiday was applied to the retail trade series, a better adjustment for calendar variation was adopted for new motor vehicle sales and, in addition, a new model change-over adjustment was applied to part of the series. The seasonal adjustment program for the electronic computer was also expanded to provide material of greater analytical usefulness.

The contents of the *Canadian Statistical Review* were reviewed periodically throughout the year, resulting in several important changes. "A Note to Users", which informs subscribers of changes or revisions in the data in the last month became a permanent feature of the *Review*. The number of series charted was increased from 46 to 68 and the charts were enlarged considerably. Towards the end of the year, a new method of printing the *Review* was adopted with the expectation that this will improve its timing considerably.

Two members of the Division gave a joint paper on seasonal adjustment by electronic computer at the annual meeting of the Canadian Political Science Association in Montreal in June, 1961.

PRICES DIVISION

The function of the Division is to collect, compile and publish data on prices and on urban consumer expenditures. The Division consists of five sections: Retail Prices, Consumer Expenditure Surveys, Wholesale Prices, Farm Prices and International Prices. The principal emphasis in the work program is on the construction and publication of price indexes but data on average prices are published for selected commodities. Surveys of urban consumer expenditure are conducted biennially to provide a basis for revising the item content and item weights in the Consumer Price Index. The resultant body of material on expenditures of Canadian families is published and is widely used by business organizations and welfare agencies.

Following the completion of a major revision of the national Consumer Price Index in March, 1961, the Retail Prices Section turned to similar revisions of the ten regional city Consumer Price Indexes. As in the national index, the primary purpose of the city index revisions was to bring the items included in the indexes and their relative importance, represented by item weights, into line with more current family spending habits as reported in the 1957 Urban Family Expenditure Survey. The time base 1949 = 100 was retained and the revised city indexes will continue to measure current retail prices as a percentage of prices in 1949. The improved technique for use of seasonally changing weights for food was also incorporated in each of the city indexes. It is expected that the revised indexes will be introduced by May, 1962.

Considerable progress was made in developing a more adequate program of field visitation, training and evaluation in retail pricing. The supervisor of field operations visited all regional offices, engaged in the training of two new pricing officers and introduced the use of part-time enumerators in food pricing. First steps were taken in establishing techniques for price re-enumeration as a source of quality checks on pricing procedures and similar steps were taken for rent surveys in rented households of the Labour Force Survey. Plans are being developed for an Ottawa conference of pricing officers in 1962, the first since 1955. The Chief of Retail Prices Section also visited all Regional Statistics Offices in an orientation and review program which related the complexities of the Consumer Price Index to the realities of pricing operations. The Consumer Price Index was discussed in considerable detail with the Regional Statistics Officer, his senior staff members and the pricing staff. This is the first time such a program has been undertaken and appears to have filled a considerable gap in the understanding and relating of the Consumer Price Index to monthly pricing program.

Preparations for publication of price statistics of urban rents were completed. A special study was carried out, the first of its kind, on average rents in 16 major Canadian cities, based on rent data obtained from rented households in the Labour Force Survey. It is anticipated that these rent statistics, classified by type and size of dwelling and degree of service, will meet an increasing need for information on rent levels within major Canadian cities. Results of the special study will be released in an occasional paper in April, 1962. It is intended to develop the series and publish current statistics periodically in *Prices and Price Indexes*.

Increasing effort was directed to a full-scale analysis of tabulations from the 1959 Urban Family Expenditure Survey which became available late in the year. The primary objective of the analysis is to provide a basis for design of the 1962 family budget survey which is to be used in a comprehensive revision of the Consumer Price Index. The 1959 survey was the first since 1947-48 which covered all family sizes, all income groups and all urban areas. It thus provides the necessary data to thoroughly examine the "target group" of the Consumer Price Index which has been projected forward since 1947-48.

In the Consumer Expenditure Surveys Section, activity was mainly devoted to processing and analysis of the 1959 survey of family expenditure. Detailed results by regions and major cities were prepared for publication. A second phase of tabulation, relating family characteristics to summary expenditures and selected detail, was carried out towards the end of the year to provide analytical tables for the Retail Prices Section and other users.

In the second half of 1961, plans were begun for the 1962 survey program, which will consist of monthly food surveys throughout 1962 and a recall survey covering all expenses and income in the calendar year, to be undertaken early in 1963. The primary purpose of the 1962 surveys is to provide weighting data for the revision of the Consumer Price Index. For this reason, the design and coverage of the food expenditure surveys were similar to that of earlier surveys in the series. However, instead of reporting for two weeks in successive months, as in 1957, families were asked to keep records in

four weeks of one month. Field work in the food expenditure surveys began in seven cities in January, 1962. Each of the regional offices in these cities was visited by head office personnel in December, 1961, in order to instruct regional officers in the conduct of the survey. A second series of visits was made in January, 1962, to review first returns and to ensure that instructions were being followed. The meetings provided essential opportunities for discussion of survey purposes and procedures with both regional officers and renumerators.

Industry Selling Price Indexes were published regularly on a monthly basis in *Prices and Price Indexes*. Correspondence with users indicated that this new system of price indexes was well received. The published indexes, which relate exclusively to output prices of manufacturing industries, were introduced in 1961 by the Wholesale Prices Section and constitute the first series in a new system of industry classified indexes.

Work on input price indexes for manufacturing industries progressed favourably and about one-quarter of the eventual number of industry indexes have been calculated on an experimental basis. Conceptual and practical questions arising from the new series concerning the ingredient prices were resolved by using some of the available output prices on the input side. This reduced the number of new prices to be collected, and lessened the discontinuity problem associated with collecting prices from buyers who are not necessarily purchasing in every monthly period for which data are required. Development of output price indexes for mining industries has continued. Here more difficulties have been encountered in obtaining relative weights for mining output which in some cases is valued only at the smelting and refining stage.

The study of conceptual and practical problems peculiar to index number construction continued to be given special attention. In this connection, experience prompted some adjustment to the original technique used for dealing with product discontinuities which arise, for example, when model changes occur. The price differential arising from model change then must be evaluated and eliminated to ensure price comparability through time. In this matter, exchanges of information have occurred between Canada and other countries, particularly the United Kingdom and the United States.

The Farm Prices Section prepared and published regularly a wide range of price indexes, mostly weekly and monthly, relating to commodities and services used by farmers and farm families, Canadian farm products at terminal markets, sensitive industrial materials, residential and non-residential building materials, and common and preferred stocks.

Major revision and development work was continued on most of the indexes. The Section continued to co-operate with the Agriculture Division in the examination of the computer output from the 1958 Farm Income and Expenditure Survey. Data from the survey will form the basis for a comprehensive revision of the series Price Index Numbers of Commodities and Services Used by Farmers. Revision of the Canadian Farm Products Index has been completed and will be released in a reference paper shortly. Previously, prices in the index were producers' selling prices at terminal markets but because of marketing arrangements such as participation payments

for grains, only initial prices could be identified and used in indexes for current periods. Thus the comparability of indexes for current and earlier years was distorted until final prices became known. In the new index, prices used will be prices paid for farm products at their point of entry into exports, domestic processing and the fresh market, and indexes will be immediately comparable. Revision of the Security Price Indexes, started last year, is almost ready for publication. The major development in the latter revision is in the method of classification of the stocks in the index whereby stocks will be classified according to the Standard Industrial Classification.

In August, 1961, a new set of indexes entitled Price Indexes of Highway Construction was released and a paper describing the series was presented to the Annual Meeting of the Canadian Good Roads Association in Banff in September. The indexes published were base-weighted indexes. Current-weighted indexes have been produced since that time and will be released shortly in a reference paper describing in detail both the base-weighted and current-weighted series. Developmental work on price indexes relating to the cost of construction of electric generation and transmission facilities is continuing. A great deal of cost data provided by private and public utilities is being analyzed and work has started on price collection and evaluation.

The International Prices Section analyzed living cost surveys in respect of numerous foreign cities in connection with the recommendation of appropriate allowances for Canadian Government personnel stationed abroad. Adjustments to the results of previous comparative price studies were also made on the basis of significant price and exchange rate movements, such as the decline in the external value of the Canadian dollar. In keeping with the requirements of the Canadian Government's revised foreign service allowance scheme, all the Section's measurements of comparative foreign price levels have now been related to concurrent price conditions in Ottawa. On behalf of the Department of National Defence, surveys of price conditions and accommodation costs being encountered by uniformed personnel serving in Europe were carried out during the year. In addition, various comparative retail price studies were conducted in respect of isolated communities within Canada.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

This Division consists of five sections: Research Projects, Public Finance, Government Employment and Payrolls, Transportation and Public Utilities. Its function is to collect and publish data on the financial structure of the three levels of government in Canada, the performance and financial condition of rail, road, water and air transport, the financial and operational aspects of electric power, gas and oil pipelines, as well as financial and operational information concerning the various communications media.

In the Public Finance Section, the Government Enterprise Unit which was established in 1960-61, made considerable strides in the development of uniform statistics on the balance sheets and operations of federal government enterprises. It is expected that the first publication will appear in 1962-63.

The municipal quarterly sample survey of receipts and payments for use in National Accounts analyses, initiated with the January to March quarter of 1961, was carried through for the balance of the year. Tabulations of the data will commence shortly but the results cannot be fully evaluated yet. A survey embracing approximately 4,000 municipalities was carried out to obtain information on activities delegated by council to special boards and commissions. Supplementary data on building permits and pension plans were also collected and tabulated for other Divisions of the Bureau.

Studies were commenced with the Bank of Canada on the adaptation of federal balance sheet data, to match the adjustments made to federal revenue and expenditure statements for National Accounts purposes. Several assignments were completed by the Public Finance Section in response to enquiries from the Royal Commission on Government Organization. In addition, tabular and descriptive material on government health expenditures was supplied to the Royal Commission on Health Services.

During the past year, the Government Employment and Payrolls Section prepared a number of analytical tables, descriptions and explanations for the Royal Commission on Government Organization as well as tabulation requirements for the Pay Research Bureau. To achieve better integration of records and make the resulting statistics more useful to the Pay Research Bureau, the Civil Service Commission eight-digit occupational classification code system was matched with the four-digit system used by the Section.

The first results of an annual, one-month survey were published in *Federal Government Employment in Metropolitan Areas*. A special survey was undertaken on behalf of the Department of Labour to provide detail of federal employees in selected occupations in a number of cities and metropolitan areas and will be continued annually. Improvements in the geographic code system used in connection with the Federal survey were introduced and this code is now being used by the Civil Service Commission.

The Provincial Employment Survey was extended by the inclusion of statistics for the Yukon Territory beginning with the report for the quarter ending June 30th.

Annual estimates of municipal payrolls, formerly produced by the Public Finance Section are now the responsibility of the Government Employment and Payrolls Section. Commencing with 1962, these statistics will be produced as an output of the quarterly survey of Municipal Government Employment and Payrolls but to date these data have been restricted to use within the Bureau. Little progress was made in producing a quarterly report of Municipal Government Employment and Payrolls owing to the lack of staff to plan and carry out the development of this survey. However, reports are being received from the majority of municipalities with a population of 10,000 and over. It is hoped that a first published report dealing with large urban municipalities will be released later in 1962. The Province of Quebec commenced to submit reports of Municipal Government Employment and Payrolls. These reports are being studied and it is hoped that the results will be included in statistics for Canada during 1962.

During the year, the Public Utilities Section established with provincial officials joint procedures for the collection of annual and monthly natural gas distribution statistics from the provinces of British Columbia, Saskatchewan, Ontario and Quebec. In addition, monthly joint collection procedures were undertaken with the Province of Alberta. The first *Gas Utilities (Distribution Systems)* annual report was released while the first *Natural Gas Bills* survey was compiled and will be released in the coming year. Joint collection procedures for radio and television station statistics were worked out with the Department of Transport and the Board of Broadcast Governors.

Commencing January, 1961, monthly electric power statistics for the province of British Columbia are provided to the provincial government together with annual data concerning capability and load. A major revision of the concepts of the *Annual Survey of Capability and Load* was undertaken after discussions with the Canadian Electrical Association, the results of which will be known by the end of May, 1962.

The Public Utilities Section took an active part in the development and successful inauguration of the Interdepartmental Advisory Committee on Energy Statistics and a representative from this Section is a member of the Committee. This Division co-operated with other parts of the Bureau in the establishment of procedures for the collection and compilation of crude oil supply-demand information. As a consequence, the final stage in the extensive review of oil pipeline statistics has been completed and will become operative in January, 1962.

During the year some progress was made in the formulation of a long range program for a systematic and orderly development of transportation statistics which has already resulted in a considerable improvement in timeliness. The Transportation Section was called upon to produce a large number of reports and studies for the Royal Commission on Government Organization.

As of January 1, 1961, the classification of commodities used in producing the monthly and annual *Shipping Report* and *Canal Statistics* was changed to conform with the revised DBS Standard Commodity Classification and plans are being made to study the effects of this change on the continuity of the data. Arrangements for compiling water ton-mile statistics were completed. By agreement with the Canadian Maritime Commission, the Transportation Section has undertaken to provide its statistical requirements. Initial plans to produce commodity flow and origin and destination data for Water Transport are well under way. In addition, a complete review and revision of the annual *Water Transportation* report was initiated.

A reconciliation of the revised DBS Standard Commodity Classification and the Canadian Freight Commodity Statistics Classification (Canadian Railway Association), was effected during the year. This will make possible the future production of railway commodity data on a comparable basis with those published for other transportation series. It is intended to produce the annual report for 1961 and perhaps the monthly reports for 1962 in accordance with both classifications to enable the users to link the two series to maintain continuity. The weekly carloading schedule was revised and updated to take into account changing patterns in commodity movement.

Railway transport and express companies' statistical returns for the years 1875 to 1949 were turned over to the National Library for incorporation with other material relating to the history of Canada. Working arrangements with the Board of Transport Commissioners were reviewed and improved to the satisfaction of all concerned. Further attempts have been made to obtain data enabling the reconciliation of railway employment statistics between the years 1955 and 1956 when the new uniform Canadian Classification of Railway Employees and Their Compensation came into effect. Little progress, however, has been made to date.

Aggregates and cross-analysis of aggregates resulting from the Trans-Atlantic Air Passenger Survey were compiled but because of the unsatisfactory results obtained, distribution was limited to the Canadian Travel Research Association. The 1960 edition of *Civil Aviation* contains a substantial expansion of air carrier statistics. Included for the first time are descriptions of civil aviation terminology. A number of meetings were held during the year with representatives of Air Transport Board and the Economics Policy Branch of the Department of Transport in an attempt to work out a joint co-operative arrangement for the collection, compilation and publication of air transport statistics. Although some progress has been achieved a satisfactory working relationship has not yet been reached.

In the field of road transport a National Advisory Committee on Statistics of the Canadian Trucking Associations was organized in October, 1961, to assist the Bureau with the development of road transport statistics. As one of its first major undertakings the Committee is studying the possibility and desirability of producing a quarterly Motor Carrier Freight Report. Various series on *Motor Vehicle Traffic Accidents* are being reviewed by an inter-divisional committee. A recent change was made when arrangements were completed to exclude from the annual *Motor Carrier Freight* and annual *Warehousing* reports, companies engaged in moving and storing household goods. The operations of such companies now appear in a separate publication, *Moving and Storing—Household Goods*. As a result the *Motor Carrier Freight* report now presents a more accurate picture of the for-hire freight carrier industry and the name of the warehousing report was changed to *Warehousing—General Merchandising and Refrigerated Storage*.

SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for all field activities of the Dominion Bureau of Statistics. Current information on many topics is obtained by temporary enumerators, working under the supervision of the different Regional Offices, who interview each month a scientifically selected sample of approximately 36,000 households across the country.

Each month questions on labour force activity are asked and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five main regions of the country. At the same time, enumerators inquire about rents paid and the information elicited is used to compile the rent component of the Consumer Price Index.

In addition, a variety of other information is obtained from time to time. An annual bulletin entitled *Household Facilities and Equipment* results from special questions asked in May of each year and provides information on the facilities and equipment present in Canadian homes. Other special questions during the past year dealt with multiple jobholding, immigration, annual work patterns and income. A survey of Sport Fishing and Hunting was conducted in February, 1962, for the Canadian Wildlife Service of the Department of Northern Affairs and National Resources. A monthly Food Expenditure Survey is being conducted during 1962 to determine what changes have occurred in the pattern of family food expenditures since the last similar survey.

As part of their continuing duties, the Regional Offices collect data on retail prices of commodities for use in compiling the Consumer Price Index. They also maintain, for the convenience of local business firms and others, a file of all current DBS publications. The collection of business reports, which other Divisions of the Bureau have not been able to obtain by mail, is also carried out through these offices.

The Regional Offices were responsible for all phases of field organization and supervision of the 1961 Census of Canada. All candidates for Census Commissioner appointments were interviewed prior to the appointment of the 1,350 Census Commissioners in March and April, 1961. Staff members of the various Regional Offices worked closely with the Census Commissioners during the entire period of their appointment.

The field staff, with assistance from Head Office, organized and conducted a total of 92 training schools for Census Commissioners during April. They assisted the Census Commissioners during May in the selection and training of approximately 32,000 enumerators. The Regional Officers advised and assisted in local problems of organization and in radio and television publicity.

During the period of actual enumeration which commenced on the evening of May 31, 1961, (with the enumeration of transients located in hotels, motels, missions, etc.,) the field staff directed and co-ordinated the Census Commissioners under their jurisdiction by checking on progress and quality of enumeration and by assisting with the numerous local problems which are encountered in such a large-scale operation.

During July and August, the Regional Office staffs organized and supervised a number of projects undertaken to measure the quality and completeness of census enumeration.

As census returns were received in the Regional Offices, large clerical staffs were engaged, trained and supervised in the recording, editing and coding of Census data and in the processing and payment of all Census Commissioner, enumerator and other accounts.

DATA PROCESSING SERVICES

The large-scale processing of statistical data at the Dominion Bureau of Statistics is undertaken by the Tabulating Services Division in conjunction with the Central Programming Staff. The two divisions work closely to improve the processing services in the Bureau using the equipment most suitable for the purpose.

Central Programming Staff

The functions of the Central Programming Staff are systems analysis and programming of DBS computer applications for the electronic data processing installation. Applications are carefully studied and only those suitable to processing on the computer are selected for this treatment. All others continue to be processed manually, by comptometer, or on conventional punch-card equipment.

The staff works closely with subject-matter divisions to determine the areas in which the computer can best assist in the processing of statistical data. When a preliminary study indicates the need for computer facilities, the matter is reported to the DBS computer committee. If approval is given, programmers and systems analysts arrange to work with officers of the division concerned to devise a system for the operation. An attempt is made in each case to re-assess the whole procedure with a view to incorporating into the computer system clerical as well as machine processing aspects of the operation.

During 1961-62 the main effort was directed to the development of a system for the 1961 Census. This included the development of decoding, editing, and tabulation programs. It also involved the modification of sort and generator routines and the preparation of such special purpose programs as digital sorts and sequence checking routines. In total the system for the three censuses of Population, Housing, and Agriculture required over 450 programs, consisting of over 370,000 instructions.

Senior programmers also worked with officers responsible for the analysis of the 1961 Census sample data to develop a system for editing and tabulation. In this case it is necessary that income, fertility and migration data be associated with appropriate characteristics enumerated in the Census of Population and Housing before tabulation is possible. Suitable counts from the population data must also be determined for weighting each of the sample characteristics. Work in this area is only in its preliminary stage, with preparation of programs being the main task for the next fiscal year.

Systems, together with computer programs, have been developed in other areas. Those for processing import statistics have been completed and, commencing with the January, 1962 data, put into effect. Work has also been completed on the Employment and Payroll series as well as on the monthly Labour Force Survey. These systems, however, have not been put into effect pending such time as the pressure for time on the computer to process census data diminishes.

Programming of the Farm Income and Expenditure Survey continued in 1961-62. During this period, programs for variance calculations and non-analytical tabulations were completed and considerable progress was made

in the preparation of those required for the production of analytical data. The non-analytical tabulations produce totals for each item of income and expenditure and, in some cases, the number of units involved. The analytical tabulations, on the other hand, produce cross-classifications of two or more characteristics such as (a) farms according to type of management, type of holding, age of operator, education of operator, and (b) characteristics of the family and the farm.

Programs have been developed for adjusting economic time series, including rates of change, and for adjusting monthly series to annual levels. These programs have been patterned after adjustment procedures developed in the United States.

The programming staff worked closely with the Tabulating Services Division to improve processing service in the Bureau. As a result programs were developed to process summary data produced on punch-card equipment in the case of hospital morbidity required by the Royal Commission on Health Services. Conversely other programs were prepared to provide summary data in the form of punch cards for tabulation on conventional punch-card equipment in the case of federal employment data required by the Pay Research Bureau of the Civil Service Commission. This approach permits the Tabulating Services Division to use equipment most suitable for the purpose.

Tabulating Services Division

The subject-matter divisions of the Bureau gather data which form the basis for statistical tables. The Tabulating Services Division provides a service, using a variety of tabulating methods, to process the data reducing it to more manageable form for further analysis. Broadly speaking, there are three main methods of tabulation in use in the Division: clerical compilation; punch-card tabulation and computer processing.

When aggregates only are required involving a minimum of cross-classification, these are produced directly as a clerical operation by means of peg-bar methods of compilation using comptometers and desk calculators. This group, about 25 operators, handles a considerable volume, particularly of data where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work. In the past year, this group has undertaken an increasing number of special projects involving more complicated calculations. It appears that it could be profitable to extend the services in this direction.

Next in order of complexity from a tabulation point of view are the many Bureau projects involving more difficult manipulation of the data and a larger number of more complex cross-classifications. These are accomplished in the Division using a wide variety of conventional punch-card equipment. Over 100 operators record the data from the source documents onto punch cards, about one half of them punching the cards and the other half verifying them, independently, for accuracy. Another group of some 60 operators use other punch-card equipment, such as sorters, tabulators, reproducers and collators, to group the punch cards by the various characteristics of the data and to produce in printed form the totals required.

One important feature of punch-card tabulation which has been developed to a high degree of efficiency in the Division has been the editing of the data by mechanical means, seeking out the inconsistencies which can arise through misinterpretation of the instructions and definitions governing the collection of the data and through errors in recording the answers. During the year, the latest type of equipment to be developed was acquired to increase the volume of such work that could be handled.

To handle the most complex applications, an Electronic Computing Centre was established in the Dominion Bureau of Statistics. Although the greater part of the time of the computer has been allocated to the work of the Bureau up to the present owing to the needs of the 1961 Census, some of the requirements of other government departments and agencies are accommodated. Priorities in the use of the equipment are assigned by the Interdepartmental Committee on Electronic Computers. The installation of the Centre consists of an IBM 705 System and an IBM 1401 System. The latter is used principally as input and output for the former, although it can handle complete projects of a limited nature.

The application which has absorbed most of the computer time to date has been the processing of the 1961 Census of Canada. The mark-sense principle, which was used for the 1951 Census, was developed further and a unique "document reader" constructed. Using an optical system, the marks on the questionnaires were "read" and transferred to mylar tape in the form of magnetized spots. These tapes were then used directly by the computer to check out the information and prepare the tabulations. The use of a computer rather than the conventional punch-card equipment has facilitated cross-classification of data and improved the quality of the statistics. Enumeration commenced in the field in June, 1961, and processing had progressed to the point where first results were released in March, 1962.

The Computer Centre is operating regularly on a three-shift basis. The timetable mapped out is based upon 24-hour a day operation for a five-day week and it appears that this will continue for an indefinite period.

During the course of the year, as in the past, quite a number of projects were undertaken for other Government Departments and Agencies on a cost reimbursement basis under individual agreements.

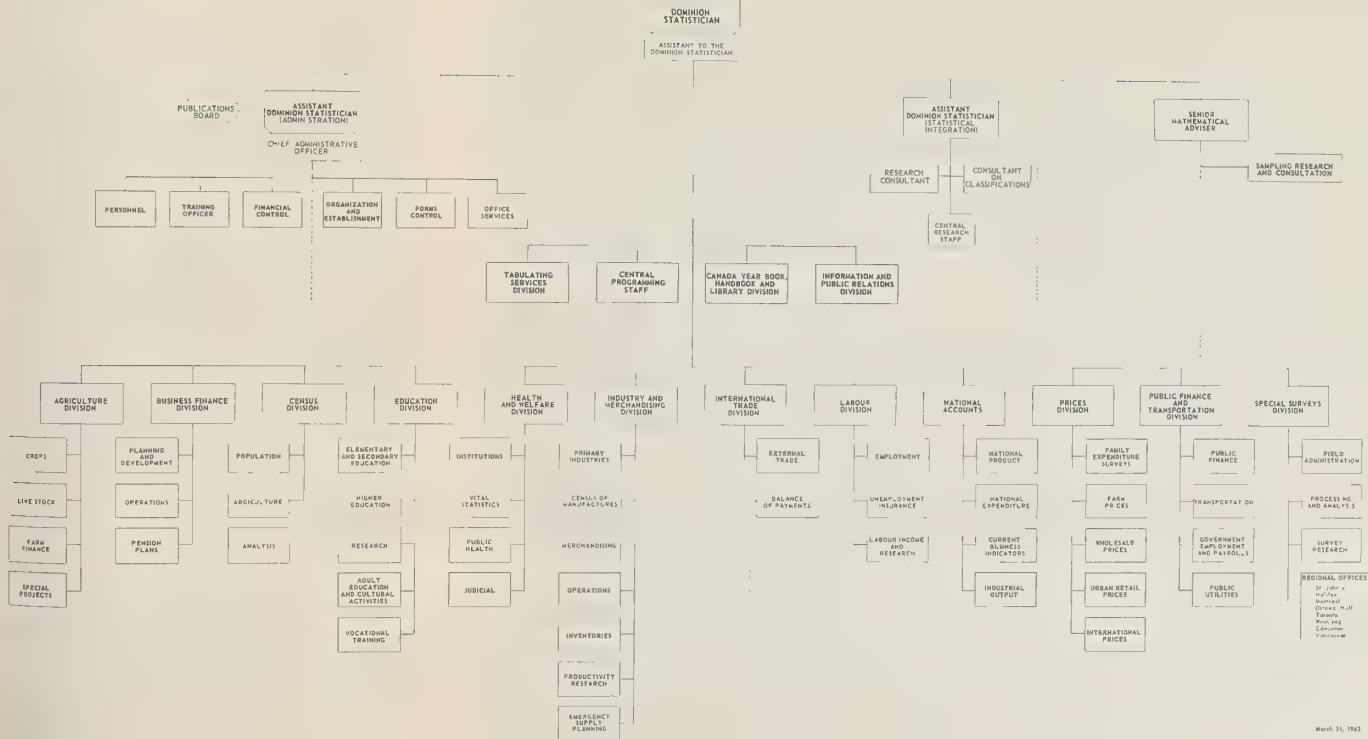
ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general administration, staff organization, financial control, forms control and office services such as the addressograph unit, composing and drafting units, stenographic pool, supplies, mail and messenger services.

Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel and Organization and Establishment Sections. In carrying out these functions it is necessary to maintain close liaison with the Civil Service Commission on recruitment, pay, promotions, transfer and related matters.

DOMINION BUREAU OF STATISTICS GENERAL ORGANIZATION



DOMINION BUREAU OF STATISTICS

Chart showing organization

March 31, 1962

This is the first year in which the Bureau had the services of a full-time Staff Training Officer. One of his main duties was to act as a consultant to divisional officers and supervisors in advancing on-the-job training procedures. Bureau-wide training in this first year, was limited to orientation sessions, to a development program for groups of first-line supervisors, and group training sessions for clerical staff who operate or supervise the operation of desk calculators. Help was given to junior staff in arranging for correspondence courses in basic mathematics and elementary statistics as a part of a policy of encouraging individual development. Arrangements were also made for staff members to take out-service training at universities and conference centres, and in-service training at courses sponsored by the Civil Service Commission. In the planning stages, is a testing program to aid in the selection of clerical staff for promotion and for guiding persons into career groups according to their ability, interests and initiative.

The staff employed at March 31, 1962, numbered 1,817 an increase of 63 over the number employed on March 31, 1961. The establishment authorized for the year ending March 31, 1962, was 1,857 continuing positions and 98 man-years of casual, clerical assistance compared with 1,777 continuing positions and 117 man-years of casual assistance for the previous year. During the year 36 statisticians and economists were recruited and 15 separated. There were 22 research assistants employed during the summer of 1961. Throughout the year 240 promotional competitions were conducted.

For the processing of the 1961 census returns, a total of 2,391 temporary clerks were employed during 1961-62, in 1,028 man-years of casual, clerical assistance as against 119 appointed during the preparatory stages of the Census at March 31, 1961. At March 31, 1962, only 330 remained on the staff, all at Head Office.

The Personnel Office maintains close liaison with the Health Unit, a branch of the Civil Service Health Division of the Department of National Health and Welfare, located at the Bureau. Employees requiring medical examination and special investigation are referred to their family physician or to the Health Centre of the Civil Service Health Division where advisory and diagnostic services are available.

Suggestion Awards

During the fiscal year, fifty-seven suggestions were received and evaluated by the Suggestion Award Committee, ten of which were granted awards.

Financial Control

In addition to its usual function of preparing estimates, examining and controlling expenditures and operating the Publications Distribution Unit, the Accounts Unit was heavily committed during the year to 1961 Census financial matters. These included financial authorities, paying arrangements for Census Commissioners and enumerators, advice to Regional Statistics Officers and the processing of special accounts. The arrangements to have census accounts processed through local Treasury Offices worked out very well and a high degree of co-operation was received from all representatives of the Comptroller of the Treasury.

The volume of work in the Publications Distribution Unit continued to rise. About 12,000 subscriptions were serviced involving the distribution of some 1,500,000 individual publications, as well as several thousand casual sales processed.

Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications, which resulted in savings of both time and materials.

During the year under review, the Forms Control Section processed 2,940 forms consisting of 8,598 pages, excluding miscellaneous forms required for the 1961 Census. Of these, 1,094 pages were reprints, 5,147 were revisions and 2,357 pages were designed or redesigned. For use in the 1961 Census of Canada, 266 forms and questionnaires were processed totalling 4,511 pages of which 288 pages were reprints, 14 pages revised and 4,209 pages were designed or redesigned. Envelopes numbering 217 were also printed, revised or redesigned.

Office Services

In the Addressograph Sub-Unit of the Office Services Section, 9,973,705 forms were addressed for the various divisions of the Bureau and 432,652 for other government departments. In addition, 225,101 plates were embossed, 147,359 plates corrected and 202,406 plates deleted.

The Composing Unit planned, vari-typed and prepared for printing 11,735 pages of tabular and textual material. In addition, 7,653 hours were devoted to miscellaneous vari-typing of forms. Based on the current average of 1.5 hours per page, this represents a theoretical production of 5,102 pages of publication, bringing the Unit's total production to 16,837 pages.

The Drafting Unit completed 2,006 economic charts, maps, diagrams and various illustrations, in addition to the ruling of tables for the Composing Unit which totalled 6,371.

The outgoing mail numbered 21,552 bags, containing 5,995,290 pieces of mail.

In addition to supplying stenographic and typing service to the various divisions of the Bureau, the Stenographic Pool provided members of the staff on a loan basis to divisions for 42 days. A total of 27,230 pages were typed of which 11,193 were photocopy and paper masters, 16,037 were drafts, statements and lists. Letters transcribed from dictation numbered 2,863. As well as the foregoing, 75,642 forms, envelopes and form letters were completed and prepared for mailing.

During the period under review, 2,675 requisitions for contact printing were received and completed involving a total of 62,841 prints.

The Supplies Sub-Unit received from the Department of Public Printing and Stationery materials for a value of \$489,267. Requisitions numbering 392 were completed for goods and services for which the Department of Public Works is responsible.



ANNUAL REPORT



*Presented to the House of Commons
by the Dominion Bureau of Statistics.*

DOMINION BUREAU OF STATISTICS

APR 1963
OF THE

*Annual
Report*

For the Fiscal Year ended March 31, 1963

CATALOGUE No.

11-201



CANADA

ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1963

June, 1963
1101-502

Price 40 cents

*To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1963.

Respectfully submitted,

A handwritten signature in dark ink, reading "Mitchell Sharp". The signature is written in a cursive style with a large, prominent 'M' and a long, sweeping 'S'.

Minister of Trade and Commerce

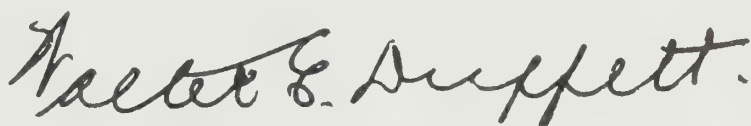
Ottawa, Canada
June, 1963.

THE HONOURABLE MITCHELL SHARP,
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1963.

Your obedient servant,

A handwritten signature in dark ink, reading "Robert G. Duffett." The signature is written in a cursive style with a large initial 'R' and a trailing flourish.

Dominion Statistician

Ottawa, Canada
June, 1963.

GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's activities in the Dominion Bureau of Statistics as well as certain operations closely associated with the office of the Dominion Statistician. Subsequent sections deal with the work of subject-matter and service divisions.

Among developments affecting the entire Bureau of Statistics during the year, two were of major importance. The first was the suspension of recruitment from June 28, 1962 to January 2, 1963. The second was the publication, in December 1962, of Volume 3 of the Report of the Royal Commission on Government Organization, which contained important observations and recommendations regarding the development of the statistical services of the Federal Government.

The suspension of recruitment, in conformity with a government-wide economy program, affected the Dominion Bureau of Statistics for approximately six months and gave rise to a considerable number of vacancies, which were in the course of being filled at the end of the fiscal year.

The Report of the Royal Commission on Government Organization drew attention to the great and growing importance of statistics in decision-making in government and business, and made recommendations designed to clarify the status of the Dominion Statistician, to strengthen the staff resources of the Bureau, to facilitate the co-ordinating function of the Dominion Statistician and to define the respective roles of DBS and a number of government departments. As the fiscal year drew to a close, the Government was considering these recommendations.

The 1961 Census of Population, Housing and Agriculture was being tabulated during the year, although first results had been released in the previous fiscal year. Much of this work was carried out by the new computer which has made it possible to prepare a greater wealth of detail than in previous censuses; although, as is not unusual with innovations of this kind, occasional delays were encountered. Tabulation will be complete by the end of 1963 except for a sample survey of migration and income. A number of monograph studies are in the course of preparation and others are anticipated.

Co-operative arrangements were further pursued with government departments at all levels and with international agencies. Expansion continues in the statistical activities of the provinces, and efforts are being made to co-ordinate federal and provincial programs in order to improve the quality of the statistics and minimize respondent burdens.

The Government of Canada is acting as host to the 34th Session of the International Statistical Institute, which is to meet in Ottawa during the latter part of August 1963. Concurrently, there will be meetings of the Institute of Mathematical Statistics and the International Union for the Scientific Study of Population. Preparation for this large conference occupied a good deal of the time of the Dominion Statistician and his senior associates.

The Corporations and Labour Unions Returns Act was passed in April 1962 and came into force on January 1, 1963. The administration of this Act is quite separate from the operations of the Dominion Bureau of Statistics but is part of the duties of the Dominion Statistician. The purpose of the legislation is to provide information about the extent of foreign participation in Canadian corporations and unions. Financial and other reports are required from some 35,000-40,000 corporations and about 200 trade unions.

The Dominion Statistician wishes to acknowledge the continued contribution of the Bureau's competent and capable staff both in assisting the Dominion Statistician in preparing to carry out the above legislation and in the course of their regular duties throughout the many and varied activities carried out by the Bureau; their loyalty and devotion to duty have been of vital importance in the accomplishments of the past year.

Central Research and Development Staff

During the year members of the staff have been engaged in a variety of projects and participated in numerous divisional and interdivisional activities. A summary of the main developments follows:

Considerable time has been devoted to preparing the groundwork for a series of census monographs based on the 1961 Census and related material. Plans on the following monographs are far advanced: The Canadian Labour Force; Income of the Canadian Population; Internal Migration; Housing in Canada; Trends in Merchandising in Canada. Other topics are being considered.

Work has continued on the various statistical classifications and their implementation. A French edition of the Standard Industrial Classification has been prepared and is in the process of being printed. An important step in the uniform implementation of the SIC is the development of the Standard Lists of Establishments. Additional staff has been secured to ensure the completion and maintenance of this list. By linking the establishments of multi-establishment firms through a system of identification numbers, the list will provide also a bridge between survey data obtained on the basis of establishments and statistics covering the firms as a whole.

Implementation of the Standard Commodity Classification of Imports has been postponed until January 1964 owing to staff shortages and to minimize delays in publication of current statistics. Timeliness of the import statistics became especially important when surcharges and special regulations were introduced in June 24, 1962 to conserve foreign exchange. Preparations for the change-over in import coding are proceeding. Amendments to the Standard Commodity Classification during the period 1959-62 have been assembled and reprinted pages for Volume I (The Classifications) are now available. Volume III (Alphabetical Index) is now in manuscript and will be published soon. A commodity classification for railway freight which will provide information comparable with that from the Standard Commodity Classification is in preparation. Its completion awaits further action on the part of the railways and the Board of Transport Commissioners.

Studies preliminary to the construction of the 1961 Input-Output table are proceeding and a general plan for future work has been drawn up. Procedures have been set up for one of the principal studies in preparation of the table designed to summarize commodity flows from their source of production to their end use. This study covers the whole field of commodity statistics, including production, imports, exports, and materials used in production. In order to set up the work sheets for the study, it was necessary to examine the feasibility of using the Standard Commodity Classification in order to summarize in tabular form statistics from various sources on a comparable basis. Certain proposals, designed to improve the comparability of commodity statistics, resulted from these activities.

Work on the Fixed Capital Stocks Project, which had been interrupted as a result of staff shortages, was resumed during the fiscal year. Preliminary estimates of the gross and net stocks of fixed reproducible capital, net fixed capital formation and capital consumption allowances by industry, in current and constant (1949 and 1957) dollars, have been prepared for 1926 to 1959, for eight out of eleven industrial divisions of the 1948 Standard Industrial Classification. Some of the preliminary estimates have been circulated to various Government Departments for analysis and comment, but a decision regarding the suitability of this material for publication has not been made yet. Work is now going ahead on the remaining industrial divisions.

Developmental work continued in the field of financial statistics in collaboration with several divisions of the Dominion Bureau of Statistics. The survey of quarterly corporation balance sheets, carried out in the Business Finance Division in 1961, continued and results for trust companies, mortgage loan companies, instalment finance companies and personal loan companies will be released shortly. Preparations were made for the Public Finance and Transportation Division to undertake surveys of quarterly government balance sheets as soon as the required staff is secured. The Central Research and Development Staff acted as the focal point for requests for information from the Royal Commission on Banking and Finance and considerable assistance was given to this Commission.

A survey of consumer finances was taken in March-April 1962 in conjunction with the monthly labour force surveys. Income data were obtained from approximately 10,500 family units along with some new data on work experience during 1961. A report will be published in the latter part of 1963. Work continued on the planning of the analysis of the income sample from the 1961 Census of Canada. Data for the sample may become available early in 1964. Quality checks were also carried out. Tabulation of the farm family income statistics for the 1959 Survey of Farm Income and Expenditures was started and preliminary results have become available. It is planned to release some statistics later in 1963. Special analysis of consumer financial data were carried out for the Royal Commissions on Health Services and on Banking and Finance, and other assistance was provided Commission staffs.

In the field of energy statistics, the Interdepartmental Advisory Committee on Energy Statistics concentrated on problems in refined petroleum products and electric power statistics. The re-organized and enlarged Federal-Provincial Committee on Oil and Gas Statistics was instrumental, among other

things, in instituting joint collection and tabulation procedures for oil and gas pipelines. Meetings were held with representatives of petroleum refiners and distributors, oil pipeline companies and electric utilities on a wide range of problems. One of these, the development of a supply-disposition table on crude oil and equivalent by source, necessitated the introduction of changes in concept and reporting procedure by provincial governments, oil pipeline companies and petroleum refineries.

While a very large part of the resources of the Dominion Bureau of Statistics is understandably oriented primarily towards the collection and compilation of national economic aggregates, the demand for data applicable specifically to provinces, or to regions within provinces, has been increasing substantially. This demand frequently arises from the needs of provincial and municipal governments, and of commerce and industry, for more adequate factual knowledge and has been expressed in several forms. Perhaps most significant of these were the resolutions passed in the summer of 1962 by the Dominion-Provincial Conference on Economic Statistics. The Conference recommended that DBS set up a staff with specific responsibility for studying provincial statistical needs and developing data to supply such needs. In line with this recommendation, and similar requests from other sources, it is hoped that the Bureau will be in a position to expand its operations in the area of provincially-oriented statistics.

A particular area of concern in the past year has been the problem of determining the most appropriate geographic framework within which to estimate or publish economic statistics. The Bureau has become aware that this is a problem of concern to many provincial agencies as well, and discussions have been proceeding with provincial authorities. In this area, as in many others, the Bureau's chief concern is to ensure that geographic classification systems in use in any one part of the country should be capable of being integrated in some way into a national classification system.

Sampling Research and Consultation Staff

The Sampling Research and Consultation Staff has been engaged in a number of studies and activities. The most important projects are summarized below.

In preparation for the redesign of the Labour Force Survey a mathematical model has been devised to facilitate the study of the sampling variability of the estimates and the cost of the survey under alternative designs. It is expected that this study will be completed in the first half of the next fiscal year. The complete design of the new sample (including stratification, maps, sampling ratios, instructions) will be prepared jointly with the Special Surveys Division.

Since September 1962, estimates of sampling variability of selected Labour Force Survey estimates have been distributed monthly to interested persons. These estimates will be issued regularly in the future as well.

Three studies in connection with the 1961 Census of Canada are near completion. The first of these is to provide estimates of the completeness of the population counts for Canada. Preliminary estimates of underenumeration

have been prepared and the final estimates will be released shortly. The second study, which was confined to a single small region, aims to analyse the effect of errors in response on the final census estimates. The final results of this study will be available in the next fiscal year. A paper on the methodology of this project will be read at the 34th Session of the International Statistical Institute. The third study concerns the Census of Agriculture. Estimates of underenumeration of acreages and farms have been prepared. A scientific paper on a general sampling problem has been published in the *Journal of the American Statistical Association*.

A study has been undertaken to analyse the methods of sampling, processing and quality control as applied in the Motor Transport Survey. It is expected a change in the procedures will result from this study.

Consulting services were rendered to several divisions of DBS in addition to the ones mentioned above: Education, Health and Welfare, Industry and Merchandising, Labour, National Accounts and Prices Divisions; also to various government departments, such as the Departments of Agriculture, Citizenship and Immigration, External Affairs, Forestry, National Health and Welfare, Labour and Public Works; to the Royal Commissions on Banking and Finance and on Health Services, the Air Transport Board and the Royal Canadian Mounted Police.

AGRICULTURE DIVISION

The Agriculture Division is responsible for the development and co-ordination of an integrated program of agricultural statistics, including the collection, compilation and publication of current statistical data relating to all phases of the agricultural industry as well as the answering of numerous inquiries from users of statistics. Although much of the data related to the program is collected by a number of other divisions of the Dominion Bureau of Statistics, by provincial governments and the Canada Department of Agriculture, the Agriculture Division assembles such data for statistical analyses and publication.

The specific role of the Division in the collection of statistics is to conduct numerous farm sample surveys (annual, monthly or seasonal) from which are derived estimates of the acreage and production of crops, number and production of the various kinds of livestock and poultry, as well as farm prices and wage rates. It also conducts full-coverage surveys at the manufacturing or wholesale level for production and stocks of a number of agricultural products and co-operates directly with the provinces and other agencies in the conduct of certain farm and industry surveys.

A Dominion Government Interdepartmental Committee, with commodity sub-committees, and an annual Dominion-Provincial Conference on Agricultural Statistics, facilitate the co-ordination of the statistical program. The 1962-63 fiscal year's Dominion-Provincial Conference was chiefly concerned with reviewing the program of current estimates in relation to the 1961 Census of

Agriculture, specific problems raised by provincial representatives and the participation of the Economics Division of the Department of Agriculture in the over-all statistical program. Provincial delegates urged that a Canada-wide Census of Agriculture be taken in 1966.

During the year under review, data on the acreages of grain crops in 1961 became available from the Census Division. As decennial Census figures are used as benchmarks for the annual series, necessary revisions were undertaken in the annual estimates. The intercensal revisions for the 1956-61 period were completed for all crops in all provinces and revised figures on wheat, oats, barley, rye and flax for the Prairie Provinces were published.

A new "double-ratio" method of expanding acreage surveys of the Prairie Provinces, introduced by the Crops Section in June 1962, is expected to have some significant advantages over the "Current-Historic" change-ratio method used during the 1956-61 period. As usual, the extensive publication service of this Section was maintained. Basic source material, derived from the results of mail questionnaire surveys of farm respondents and supplemented by material supplied by the Board of Grain Commissioners, the Canadian Wheat Board, Marketing Boards, private industry and other government departments, was integrated to provide a wide range of weekly, monthly, seasonal and annual statistics relative to production, marketing, processing and consumption of field and special crops. Analyses of the wheat and coarse grains situations were carried in the monthly *Wheat Review* and the *Coarse Grains Quarterly*. Extensive files of data pertaining to the production and disposition of cereal and oilseed crops are maintained and hence information and special tabulations are provided, so far as is possible, in addition to the data contained in the regularly scheduled releases.

In the field of experimental estimating techniques, the Division continued to co-operate with grower and processor associations and provincial authorities in their studies of the application of objective estimating procedures to tender tree fruits in the Niagara District. A mail questionnaire survey of a large number of growers was conducted which resulted in the provision, for the first time, of data on yields per tree as well as tree plantings and removals. DBS continued to co-operate with the Quebec Bureau of Statistics in the development of a program of objective crop estimates for the Quebec apple crop. With the publication of the 1961 Census figures on vegetable acreages, discussions were held with the various provincial officials and, where appropriate, revisions were made for 1960 and 1961 to bring the annual acreage estimates into line with the Census benchmarks.

Considerable study was given to the methods by which estimates of the value of apple production are prepared in the different provinces, with emphasis on comparability. In response to a request from the Canadian Seed Growers' Association and other interested bodies that the necessary data be obtained for the preparation of annual estimates of the consumption of forage crop seeds in Canada, initial study was given to this problem. The Special Crops Unit continued close liaison with the Canadian Horticultural Council and assisted in the preparation of the annual report of the Statistics Committee of that group.

During the year, the Livestock and Animal Products Section issued monthly reports on the output of dairy factory products, fluid milk sales, milk production and its farm value, egg production, and on stocks of the principal food commodities held in storage; quarterly reports on numbers of pigs on farms and forecasts of farrowing intentions; semi-annual estimates of other livestock and poultry on farms; and annual estimates of meat and wool production and domestic disappearance. The Section also issued comprehensive annual reports on dairy statistics, livestock statistics, poultry and egg statistics, fur farms and total fur production.

This Section, along with others in the Division, co-operated with the Canada Department of Agriculture in reviewing and up-dating the manual, *Weights and Conversion Factors for Canadian Agricultural Products*. Questionnaires were revised for several surveys to adapt them more fully to company bookkeeping practices or to ensure more complete reporting. Preparations were also made to start a new series of statistics on plant sales of skim milk powder by specific price ranges, which was requested by industry and endorsed by producer and government agencies. It is intended to publish these statistics in the monthly *Dairy Review* starting May 1963. Problems associated with proposed new surveys of cattle on feed were under investigation.

The Farm Finance Section prepared estimates of cash and net farm income, volume and value of farm production, farm prices of agricultural products, value of farm capital, value per acre of farm land and rates of wages paid to male hired farm help. Its functions include the distribution and compilation associated with the questionnaires used in connection with the semi-annual surveys of crop acreages and livestock numbers.

During the year under review, efforts were continued to obtain price information which could be used as a check against, or as an alternative to, the prices reported each month by farmer correspondents. As a result, arrangements were made to receive each week from the Ontario Hog Producers' Marketing Board, a report of the dressed prices per hundredweight paid by meat packers for hogs at the various assembly yards operated by the Board. Additional information provided by the Board concerning its marketing charges and an estimated cost for moving hogs by public transportation from farm to assembly yards has permitted a fairly accurate calculation of the "farm gate" prices for Ontario hogs. Early in 1962, arrangements were also made to obtain data for hog prices in the other provinces. This consisted of dressed prices per hundredweight, f.o.b. packing plant, as collected by the Department of Agriculture in connection with the federal Agricultural Stabilization program, and necessitated the conducting of a survey of costs of services provided by stockyards and the collection of information on costs of public transportation.

A pilot survey of cattle and calf prices for Alberta was continued on a monthly basis throughout the year; known producers were asked to report prices received at the farm, classified according to grade, and the marketing channel through which their livestock were sold. Under the present method farmer correspondents are requested to report the average price prevailing in their neighbourhood which reflects all grades of the produce marketed; often the prices reported are those for products which the correspondents

themselves have not sold. Prices calculated by the new method will more accurately reflect the relative importance of the various grades marketed and the channels through which the products are sold.

Near the close of the fiscal year, a study was initiated to deal with farmers' cost for insurance incurred on behalf of the farm business. Progress was made during the year in incorporating data from the 1958 Farm Expenditures and Income Survey into the series of statistics on farm finance.

The Special Projects Section was engaged almost entirely during the year in work on the 1958 Farm Expenditures and Income Survey and in organizing and co-ordinating activities required to produce the Farmer Mailing Lists from the 1961 Census of Agriculture. Data tabulations were completed for most of the general non-analytical tables from the survey consisting of estimates of aggregates and averages, by provinces, for detail items reported in the schedule and summary items derived from the schedule. Computer processing was completed during the year for 72 of 260 analytical tables. First results of the Survey were released during November 1962, in a publication entitled *1958 Farm Survey Report No. 1: Expenditures, Receipts and Farm Capital*.

BUSINESS FINANCE DIVISION

A large part of the work of this Division is centred around the collection and analysis of the financial statistics of business firms. Surveys of corporation profits and related data are conducted quarterly and the results published about ten weeks after the end of each quarter. Profits data are provided for twenty broad industrial groups and a more detailed breakdown of these than formerly is being attempted, requiring some increase in the number of firms covered and additional detail from multi-industry firms. Estimates of capital and repair expenditures on construction, machinery and equipment are obtained three times each year from business, institutions and governments. Estimates of the expenditures of individuals for housing are also included in these surveys. One survey of capital and repair expenditures is conducted in the Fall of the year and obtains estimates for the current year and intentions for the year ahead. Each Spring estimates of actual expenditures for the previous year are collected and at mid-year a sample survey is undertaken to review the stated intentions of the previous Fall. Two reports are issued each year on the results of these surveys: *Private and Public Investment Outlook* is released in late February or early March and gives the outlook for that year, preliminary estimates for the previous year and final estimates for the year prior to that; *Private and Public Investment Mid-Year Review* is released in July and gives a re-assessment of the intentions stated the previous Fall for the current year.

The results of the profits and investment surveys provide the basic data for these items in the National Accounts and are widely used by business and government as key indicators of current and future developments in the economy. Investment in plant, equipment, housing, institutions and other facilities

is of particular significance in Canada since over a fifth of the nation's expenditures are usually made for these purposes. The size and content of the intended investment program and its regional distribution provide much information on the support that may be given to general economic activity as a result of the direct demand generated for labour, materials and equipment during the construction period and later when newly created plants or other facilities start production.

In addition to the construction data provided in the investment reports which show expenditures on construction by industries, agencies, or organizations paying for the work done, another report is prepared entitled *Construction in Canada* which provides information on value of work put in place by type of structure along with over-all estimates of labour and material content of this work. The value of construction by type of structure is reported in the capital expenditure or investment surveys. The labour and material content of these expenditures is estimated by applying ratios derived from surveys of construction contractors to the total cost estimates taken from the investment surveys. Separate estimates are also shown for the total value of work performed by construction contractors and that performed by others engaged in construction work on their own account. The report containing this information is usually released in May of each year.

Monthly statistics on construction activity, as reflected by building permits data collected from over 1,000 municipalities in Canada, are published about six weeks after the close of each month in a report entitled *Building Permits*. This report contains information by provinces on the number and value of housing units by type, for which permits have been issued, along with value data as given on the permits for industrial, commercial, institutional and government building construction. During the year, the Division undertook a program of research and development in co-operation with the Central Mortgage and Housing Corporation as a first step towards improving the quality of housing statistics. Since building permits data are used extensively in estimating the number of housing starts, a complete review was made of this series, coverage was expanded and follow-up procedures improved so as to obtain reports from all municipalities in Canada issuing building permits. Improvements were made in the methods of estimating residential capital formation to provide more accurate quarterly figures. Preliminary work was undertaken on the reconciliation of estimates of housing activity between 1951 and 1961 with census data on housing stock at these dates.

Work continued on the new quarterly survey of corporation assets, liabilities and net worth which was started in 1961 to meet the need for information on the financing of corporation activity, their liquidity position and probable demand for funds. Quarterly data up to and including the fourth quarter of 1962 will be published in May of 1963 for trust companies, mortgage loan companies, sales finance companies and small loan companies. Quarterly data for non-financial corporations will be published as surveys of this sector are improved and more complete information becomes available.

An annual survey of the financial aspects of trustee pension plans is conducted in July each year and the results of the survey are usually published about December of the same year. These surveys collect income,

expenditure and assets data for plans with fiscal years ending between July 1 of one year and June 30 of the following year from employers having a trustee pension plan and from trust companies on the investment of pooled and mutual funds. There are a variety of uses for the data collected: pension payments of individuals form a part of forced savings as recorded in National Accounts; trust and investment companies are able to follow developments in pooled and mutual funds; and government bodies to use the data as background material in social security studies.

Data was also collected on the non-financial aspects of all pension plans in operation in Canada, including underwritten as well as trustee plans. The purpose of this survey was to obtain selected information about the terms of the plans, such as eligibility, contribution formulae, the type of underwriter or trustee involved and cash option arrangements. The survey was finished in February 1962, and the results were published the following November.

Two reports on research activity, *Industrial Research-Development Expenditures in Canada* and *Federal Government Expenditures on Scientific Activities*, are released by this Division in alternate years. Data are collected during the summer months on research expenditures made during the previous year and the report is usually available in the Fall. Both reports show expenditures by scientific fields and also provide information on the number of professional employees and their level of training. The *Industrial* report shows expenditures by industry group and the *Government* report provides similar information by Department.

Monthly reports are issued on the total value of cheques cashed in fifty-one clearing centres in Canada which account for more than 80 per cent of all cheques cashed. Quarterly reports are issued on commercial failures in Canada on the basis of information supplied to the Bureau under the provisions of the Bankruptcy and Winding-Up Acts. The number of failures and the liabilities incurred are reported by region and by industry.

A continuous survey of new firms is conducted to assist divisions of the Bureau in maintaining up-to-date coverage in various Bureau surveys. Efforts are made to cover all establishments in manufacturing and wholesale trade and, for other businesses, those with fifteen or more employees. Co-operative arrangements exist with provincial governments whereby the results of these surveys are made available to them. The publication *New Manufacturing Establishments in Canada*, issued semi-annually, is based on results of this work.

The Division is responsible for constructing a standard list of establishments according to definitions set out in the most recent issue of the *Standard Industrial Classification Manual*. As the name implies, it is intended that this list be used as the standard industrial classification of establishments throughout the Bureau for the purpose of attaining comparability of coverage between one statistical series and another. By year-end, work was well advanced on this project.

CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION

The program of the Division includes the compiling, editing and publication of both English and French language editions of two official compendia of information on the Canadian economy, the large 1250-page reference volume, *Canada Year Book*, and the 320-page illustrated handbook, *Canada*, as well as the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library for statistical research and study.

Although initial work was performed during opening months of the year, the compiling and editing of the 1962 edition of the *Canada Year Book* was completed in October and held for simultaneous publication in both English and French language editions on December 4, 1962.

In the interests of economy, during a period of government austerity, it was decided to advance the publication date of the next edition of the Year Book to the beginning of the new fiscal year in April 1964, thereby entitling it the *Canada Year Book 1963-64* and its French counterpart *Annuaire du Canada 1963-64*. By the end of the fiscal year under review, planning of its contents was largely completed and the compiling and editing of the opening chapters well in hand.

The 1962 edition of the official handbook, *Canada*, was published in English and in French by offset process during the opening months of the fiscal year and released simultaneously on May 15, 1962. The planning, preparation and editing of *Canada 1963* were carried on during the period September 1962 to February 1963 and were sufficiently advanced to anticipate possible publication, in both languages, by the end of May.

In its capacity as a focal centre for Canadian statistical material, the Division supplied regular series of Canadian statistics each month for the United Nations Statistical Bulletin and the International Labour Office. In addition, the long-established practice of providing up-to-date annual revisions of Canadian material was continued for a great variety of standard national and international reference works.

The Library at the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents, and reports for the use of the DBS staff and research workers. It also has an extensive collection of statistical publications received on an exchange basis from nearly all countries of the world. The Library's resources are used not only by Bureau staff but by other government departments, business firms and academic staff throughout Canada as well as the United States through inter-library loan facilities.

In the interests of the best use of limited library space and of library services, a policy of constant review of library material is maintained, embracing considerable disposal of surplus items and rearrangement of stock. For example, current arrangements include the transfer to the National Library or to university libraries of all foreign material not required by the DBS Library, the complete rearrangement of provincial government material, and the further reorganization and centralization in the Library of the periodical collections.

An expanded classification for DBS publications was completed and will be applied in the proposed *Historical Catalogue of DBS Publications*, now in final draft stage. This is based on the classification in use for current DBS material which is listed in the catalogue of *Current Publications*. The Library's own collection of DBS publications is being rearranged by this new classification.

Cataloguing of new material in the Library has reached a stage where there are no arrears and it is possible to make progress on recataloguing of older material, including the remaining foreign publications.

The installation of a Xerox machine in the Bureau building has provided a more efficient means of copying articles and statistical tables for internal use by Bureau personnel as well as a means of answering inquiries quickly. This machine also permits the economical reproduction of limited numbers of out-of-print DBS publications, thereby meeting the needs of libraries requesting otherwise unavailable publications.

CENSUS DIVISION

Final results of Canada's Tenth Decennial Census of 1961 are being issued in the form of individual reports as the information becomes available. During the 1962-63 fiscal year, fifty-four reports were published.

The processing of the results of the 1961 Census enumeration was carried out on a large-scale electronic computer. By this process, information from the completed questionnaires is first recorded on magnetic tape by means of the electronic "document reader" at the rate of 600 forms per minute and then fed into the computer without the need for intermediary punch cards. After examining the records for completeness, the computer rearranges and summarizes the data to produce the tabulated results of the Census at speeds not otherwise possible and with numerous built-in checks for accuracy. Cross-classification of data is thereby facilitated and the quality of statistics improved. In addition, the volume of the tabulations has increased beyond that of any previous census because of the increased capacity of the equipment.

In the year under review, the staff of the Division was engaged primarily in checking the machine tabulations of the data on Population, Housing, Occupations and Agriculture and assembling the information from these tabulations into statistical reports for publication. As the individual tabulations were received from the computer, the results were checked, analysed and evaluated. The resulting statistics were then arranged in a series of tables as well as in reports for publication in advance of the series of detailed releases which will later be combined in the different subject Volumes of Census information. Subsequently, more detailed tabulations including cross-classifications were checked and compared for agreement with those made earlier and finally arranged in tabular form for publication.

A complete Census of Merchandising and Services is also made every tenth year. Following the checking of the enumeration documents provided by the 1961 Census of Population enumerators, report forms were prepared and

mailed early in 1962 to retail stores, wholesalers and service trade operators. Compilation, analyses and publication data in these fields are being carried out by the Industry and Merchandising Division of the Bureau and reports in these areas will begin to be released late in 1963.

The planning of the Census reports continued throughout the year. Booklets entitled *Publications of the 1961 Census of Canada*, listing Census publications with probable dates of release were prepared and distributed by the Information and Public Relations Division. A revised and complete brochure listing all Census reports will be prepared at the year's end and will list a number of reports which were not planned in detail at the time of printing the preceding brochure.

The individual census reports comprise four main series: —

1. The *Advance Series* provide summary information on specified basic topics for which there is a wide demand and are published earlier than the regular series of Volume Reports. The first three reports of this series were published in the previous fiscal year, while twenty additional reports showing basic characteristics of the Population, Housing, Labour Force, Agriculture and Farm Woodlands were released during the past twelve months.
2. *Volume Series* represent the main results of the 1961 Census and are prepared in such a way that the user can combine the contents to form the subject matter of each Volume. Twenty-eight reports in this series were published dealing with characteristics of the Population, Housing and Labour Force.
3. The *Special Series* contain some basic materials not included in the regular Volume Series and which relate, for the most part, to more detailed or smaller geographical areas. During the year, three reports dealing with farm characteristics and one showing the Population by specified age groups and sex were printed.
4. *Census Tract Series* contain basic Population, Housing and Labour Force data for each of the larger cities (or Metropolitan Areas) according to Census Tracts, (*i.e.*, areas of approximate uniformity in population size and composition). The first two of the twenty-five reports in this series were published at the close of the fiscal year.

In order to conserve storage space and preserve for future reference, the microfilming of the 1961 Census Population Documents was undertaken. Progress was made on preparing charts and other material describing the operations of the 1961 Census for inclusion in the Administrative Report.

A series of analytical monographs on Canadian economic and social life as measured by the Census will be published in due course. At the end of the fiscal year, the preparatory material was being completed for the authors, many of whom are university professors of economics or sociology.

In the Census Analysis Section, the regular continuing series of population estimates and citizenship statistics were prepared for publication. The first report in the annual series of population estimates for thirteen Metropolitan Areas was prepared and released during the fiscal year, as well as one

bulletin entitled *The Growth of the Population*, in the series of Analytical Reports of the 1961 Census results. Manuscript for a second report in this series was prepared for publication. Assistance was rendered in preparing population estimates and projections for the Department of National Health and Welfare and for the Royal Commission on Health Services.

In the Administration Section some 48,000 applications for verification of age using early census and National Registration records were received and processed during the year.

Consultant services on census matters were provided by Officers of the Division to other Divisions of the Bureau and to other Government Departments. A representative of the Division served on the DBS Committee on Geographical Classifications. Meetings with officials of the United States Bureau of the Census took place and a program for training a number of United Nations, International Co-operation Administration and other international students and observers was held during the period under review.

An extensive review of the Division's functions and staff requirements for planning future censuses was under way at the end of the fiscal year and a comprehensive plan for reorganization and strengthening the Division is expected to result.

EDUCATION DIVISION

The primary task of the Education Division continues to be that of collecting and disseminating information which describes the state of Canadian education. However, its role is changing and expanding to meet an increasing number of requests for further analysis and greater interpretation of the available information. Year by year, the Division provides increasing consultative service for research personnel in education and for many officials having some responsibility for the actual conduct of public education.

Since Canada has no education documentation centre, the Education Division, along with the Canadian Education Association, Canadian Teachers' Federation, Canadian Universities Foundation and other education departments or bodies, share this responsibility. As the Division compiles data on education for Canada as a whole, it provides reports, statistical data and other materials for international bodies, national organizations, Government Departments, associations and individuals. These vary in length and complexity and include chapters for UNESCO publications, tables and textual materials for yearbooks and handbooks and a wide variety of other publications.

The Division operates in a field where provincial governments exercise jurisdiction within their boundaries and collect statistical data on education, mainly for administrative purposes. Because of this, the Division maintains informal though close liaison with provincial departments, and the data collected serve both the provincial departments and the DBS. Similar relationships have been developed with the universities, business colleges and other types of educational institutions, both public and private. The Division also works closely with national educational organizations.

The Education Division is organized into six sections covering the elementary-secondary field, higher education, adult education, vocation-technical education and training, education finance, and education research, each of which, except for research, is charged with developing comprehensive series within its area and keeping abreast of changes and developments. Forms for the collection of data from the elementary-secondary schools are designed co-operatively with provincial departments for eight of the ten provinces. The other two—Quebec and Ontario—use similar forms prepared after consultation with the Bureau and provide data from these for the Division. Comparable data are obtained from the Indian schools, schools of the Northwest and Yukon Territories, Department of National Defence schools and private academic schools. This has ensured reasonable comparability, although there are still problems in equating teachers' certificates and combining school and grade classifications for all Canada. Data on higher education, business colleges, teacher training colleges and private business colleges are obtained directly from the institution on forms prepared by DBS to ensure comparability.

The Chief of the Higher Education Section has been working with the university business officers and registrars to improve the forms for the collection of data on finances and enrolment and the Chief of the Vocational Education Section has been working with the Technical and Vocational Training Branch of the Department of Labour and provincial representatives to devise forms which will produce comparative statistics for all programs receiving support from the Federal Government; similar figures are collected from private trade and technical schools. With the co-operation of the Canadian Library Association, adult education associations, the Canadian Association of Directors of Extension and Summer Schools and others concerned, the Chief of the Adult Education Section is attempting to obtain adequate coverage on a reasonably uniform basis in the field of adult education. The Chief of the School Finance Section has been co-operating with representatives of the Provincial Departments of Education and others concerned to produce an accounting manual for secretaries of school districts and hence improve their accounting procedures. Much work remains to be done to ensure complete coverage of expenditures on education in Canada and to devise means of showing figures for the current year.

The annual output of the Division consists of some fifteen reports, of which eleven are, or soon will be, regular annual publications. Occasional publications, which number four or five, generally remain current for several years, so that at any one time some twenty-five publications on education are available. In addition, each year the Division prepares special releases such as lists of private schools, short reports on institutes of technology, private business colleges and teacher training colleges. The *DBS Daily Bulletin* is used also to publish advance releases of current information, most of which will appear later in one of the regular publications.

During the year under review, the Elementary-Secondary Education Section issued *Survey of Elementary and Secondary Education, 1959-60 and 1960-61*; *Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools, 1961-62*; *Enrolment and Staff in Schools for the Blind and Deaf, 1962-63*; *Some Statistics of Private Elementary and Secondary Schools, 1961-62*; and *Interprovincial Transfers and Immigration of Children into*

Canada, 1961-62. In addition, the usual compilations were prepared for the Departments of Education of Newfoundland, Nova Scotia and Prince Edward Island for the year 1961-62. The Newfoundland Teachers' Federation purchased from DBS a set of punched cards based on the teachers' Fall reports for their province; this was the fifth department or teachers' association receiving such sets. Special requests dealt with included: one covering teachers with Saskatchewan certificates teaching elsewhere; one on size of classes in selected Canadian cities; and one on size of class related to university degrees.

The Chief of the Elementary-Secondary Education Section spent four months in Libya, acting as statistical advisor for UNESCO.

During the year, the Higher Education Section produced *Fall Enrolment in Universities and Colleges, 1961*, and *Salaries and Qualifications of Teachers in Universities and Colleges, 1961-62*. The text and tables for the *Survey of Higher Education, 1954-61* were prepared for printing and *Fall Enrolment in Universities and Colleges, 1962* and *Salaries and Qualifications of Teachers in Universities and Colleges, 1962-63* are under preparation. Other releases included: a compilation of salary scales at major universities for the Canadian Association of University Business Officers and the Canadian Association of University Teachers; an extensive analysis of 1962-63 salaries for the latter association's Bulletin; and data on average age of faculty by rank and university.

An extensive chapter on higher education in Canada was prepared for UNESCO's *World Survey of Education*; a report on engineering for an Indian publication, and a listing of Canadian universities for a handbook published by the International Universities Bureau. Data on enrolment by graduating year were collected for the Pay Research Bureau of the Civil Service Commission, the National Research Council and the Canadian Association of University Teachers.

The Chief of the Higher Education Section participated in meetings with national university organizations and, in addition, gave a paper on Canadian higher education to the Admission Committee of the Greater New York Council for Foreign Students at Columbia University.

In the Vocational Education Section, considerable time was spent in the planning and administering of the survey of 1961-62 college student costs. In co-operation with officials of the Department of Labour and the provinces, a re-organization of statistical reporting was effected in the field of vocational education. In addition, the 1960-61 edition of the *Survey of Vocational Education and Training, 1960-61* was published and bulletins covering Institutes of Technology, Private Business Schools and Private Trade Schools were issued. A special comprehensive compilation of data on apprenticeship from 1950-1962 was prepared for the Advisory Council on Apprenticeship Training of the Department of Labour. Considerable exploratory work was also undertaken covering organized in-plant training in certain industrial groups.

The Chief of the Vocational Training Section participated in meetings of the Advisory Council of Vocational Training, Advisory Council on Apprenticeship Training, Advisory Committee on Technicians Training and the Skilled Manpower Committee convened by the Department of Labour.

In the Adult Education Section, the following publications were made available: *Survey of Libraries, Part I: Public Libraries 1960*; *Survey of Libraries, Part II: Academic Libraries 1960-61*; and *Survey of Adult Education, 1959-60*. Special releases included *The Adult Learner at University, June 1962* and *Report on Pilot Project, 1962*. In the pilot project, summer school students of the University of New Brunswick were required to complete a card when enrolling, which was readily processed to give current information on the students. It appears that such a method, whether undertaken by a central office or separate institutions, is feasible and has many advantages. In addition, reports were prepared for UNESCO on Libraries, Educational Opportunities of Rural Women and on Illiteracy.

The Finance Section issued *The Survey of Education Finance, 1958* and almost completed the tables and text of the 1959 and 1960 surveys. At the request of the Newfoundland Department of Education, a survey of finances for 23 school boards in 13 medium-sized cities was undertaken, and the resulting tables circulated to all participating boards. The Chief of the Finance Section took part in a Canadian Library Association workshop which discussed the subject: "What form could federal aid to libraries take in Canada?"

In addition to publishing the 1961-62 edition of *Preliminary Statistics of Education*, and preparing the 1962-63 edition, the Research Section was engaged in the survey of University Student Expenditure and Income in Canada, 1961-62. The report will be released in three sections: — *Non-Canadian Students*, *Canadian Undergraduate Students* and *Canadian Graduate Students*.

EXTERNAL TRADE DIVISION

The External Trade Division was established on April 1, 1962, and assigned responsibility for statistics of Canada's commodity trade with other countries. These statistics are published in the *Trade of Canada* series of reports, and are widely used in the business world and in government for specific market analysis, general economic analysis and as a guide to international economic relations.

The uses of external trade statistics demand that they be published promptly and in detail by commodity and country. During the fiscal year 1962-63, considerable progress was made in reducing the delays affecting monthly publications. By the end of the year, export statistics had returned to the 5 to 6-week publication schedule in force before the introduction of the new Export Commodity Classification and import reports were appearing some weeks earlier than had been the case in the previous year.

The first results of a program to improve the release dates of the three volumes of the annual *Trade of Canada* report also became evident during the year. These volumes had been appearing at an increasingly later date for some years. To overcome the delay, it was decided to produce the photocopy for Volumes II (Exports) and III (Imports) by mechanical tabulation and to publish only every second year until normal timeliness had been regained. The first

issue of Volume II on the new basis (for 1959-60) was released in May 1962 and that for 1961-62 is expected to be available in the autumn of 1963, which will almost restore the normal schedule for this volume. It will take about two years to regain normal timeliness for Volumes I and III. Besides speeding the production of these volumes, the new technique substantially reduces their cost.

The transfer of import tabulations to the computer, in January 1962, created transitional problems for the compilation of import statistics for most of the first half of 1962. By the latter part of the year, these difficulties were rapidly coming under control and the estimated time required to produce a month's import statistics had been reduced to about two-thirds of that estimated for the earlier months of the computer operation. At the end of the fiscal year there remained only one point at which a manual operation still caused considerable delay in the production of import statistics; this should be under control by the end of 1963.

It was not possible to introduce the new Import Commodity Classification in January 1963 because of a shortage of trained staff. This shortage would have greatly increased the delays in the production of monthly import statistics which will inevitably be associated with the introduction of a new classification. Considerable progress was nevertheless made towards this objective during the year, and the remainder of Section II of the new classification was introduced in import statistics from January 1963. About half of all import commodity classes are now fully consistent with the new classification.

HEALTH AND WELFARE DIVISION

This Division is responsible for the production of statistics on the state of the health of the Canadian people, the enforcement of law and the administration of justice in Canada. Three sections share the responsibility for producing health statistics. The Vital Statistics Section is concerned with recording and analysing births and deaths as well as producing statistical studies on mortality, fertility and life expectancy. This Section also receives records of marriages and dissolutions of marriages. The Institutions Section is concerned with collecting detailed information on the services, facilities, staffing and finances of general and special hospitals as well as mental and tuberculosis institutions. The Public Health Section is concerned with acquiring data on the conditions and characteristics of patients in hospitals of any treatment type and with obtaining figures on the incidence of a number of communicable diseases. A fourth Section, the Judicial, is responsible for the production of criminal and judicial statistics based on figures supplied by the National Parole Board, by police departments, courts and correctional institutions.

In keeping with the Bureau's statutory obligations in the field of Vital Statistics, the Division prepared and published the regular series as well as special reports on specific diseases and on particular features of mortality and life expectancy. The provinces were supplied with the basic tabulations required under Dominion-Provincial agreements.

Throughout the year, there was an increasing demand from medical, public health, market research and other areas for a fuller analysis of current and historical vital statistics. One instance of this demand was provided by the 'thalidomide episode', which resulted in carrying out an intensive examination of a large body of mortality data in order to honour requests from several sources for information on congenital anomalies of all types. Other requests handled related to research into the epidemiology of particular diseases and investigation of population and fertility trends. These requests gave rise to compilations more detailed and analysis more refined than those carried out in the past.

On behalf of the provinces and the Family Allowance Administration, the Division compiles numerical and alphabetic registers of births, deaths and marriages. Negotiations with the agencies concerned have been under way for some time, with a view to curtailing these non-statistical operations and it was possible to eliminate some of this work in 1962-63.

The Division also undertakes each year to provide the secretariat services for the Vital Statistics Council of Canada. One matter discussed in the year under review was the provision of the registers of births, deaths, and marriages; another was the content and design of the forms used for registering these vital events. The Council asked the Division to examine all these forms to evaluate the administrative and statistical usefulness of the items and to consider how best to standardize them in terms of content, size and spacing.

The Division is intent on reaching a number of objectives in the vital statistics field: -meeting new and continuing demands for additional data and at the same time advancing regular publication dates; reducing costs by taking every advantage of new techniques; and ensuring the maximum co-ordination between its own operations and those of the provincial registration and statistical offices. The Division is therefore experimenting with and introducing new processing techniques, arranging for the preparation of new and revised tabulations, and consulting with the provinces about the feasibility of receiving the raw figures in a form that will eliminate duplication in data-reduction operations.

In 1962-63, for the first time, electronic computer processing was used to prepare administrative and financial statistics of the hospitals providing general and special treatment services. The statistics for 1961 should be available for analysis and publication by the end of 1963. Included in the 1961 statistics is a new and comprehensive series of hospital indicators expressed in terms of ratios and relationships. In the past, there has been some delay and difficulty experienced in obtaining uniform and internally consistent data on which to base statistics related to general and special hospitals. These problems in source data are gradually being overcome by means of discussions with officials of provincial hospital insurance commissions, health departments and hospital associations. At institutes and seminars held in several provinces, reporting requirements and checking procedures have been explained by Division representatives.

The 1960 publication program for general and special hospitals was completed by the end of 1962. The analytical material, necessarily left out of the 1959 reports, was restored in 1960. The 1961 data relating to mental and tuberculosis institutions were prepared for publication.

At the request of the Royal Commission on Health Services, the Division undertook to collect, process and tabulate material on hospital morbidity statistics from eight provinces. In the meantime, the Division has received, or been promised, cards or magnetic tapes containing copies of the admission-separation records for all cases separated in 1961 from general and special hospitals. A standard code was devised to make the ten provincial codes compatible and a tabulating program based on this code was outlined. The 1961 admission-separation forms for Yukon hospitals were coded and tabulated.

In addition to publishing the regular reports on mental institutions, special work was carried out for the Royal Commission on Health Services, including a cohort-type study of a sample of those persons first admitted to mental institutions for treatment in the period 1958-60.

The regular reports on tuberculosis institutions were published during the year together with a monthly report on the incidence of tuberculosis derived from provincial registers of known active, inactive and reactivated cases of tuberculosis. Visits to several provincial registers and to a number of individual sanatoria were made during the year but more field work will be needed to perfect the new system of reporting established in 1961.

Weekly bulletins on the incidence of communicable diseases were released for the benefit of public health authorities and these figures were later incorporated into an annual publication. Tabulations of certain venereal infections reported to DBS were forwarded to the Department of National Health and Welfare for inclusion in a special report. All provinces except Alberta supply communicable disease records on weekly summaries. In the case of Alberta, individual case records are forwarded for all diseases except venereal infections and from these individual records, tabulations subdivided by age, sex, city and health unit, are prepared and sent to Alberta on a weekly and four-weekly basis.

The 1961 report on the home nursing services provided by the Victorian Order of Nurses was published but will be the last in this series; tabulations only will be made for the internal use of the VON. With the 1962 edition of *Illness in the Civil Service*, work in this area will cease although a modified form of data will be maintained in the Public Finance and Transportation Division but not published. The bi-weekly series *Upper Respiratory Infections within the Civil Service* will also be discontinued.

Publication of the results of the Canadian Sickness Survey, held in 1950-51, was concluded with the issuing during the year of the French version of a number of reports previously available only in English, including the comprehensive report *Illness and Health Care in Canada*.

To fulfil requests from the Department of National Health and Welfare, from organizations and individuals active in the field of health, the Division developed information on morbidity or health care. Both morbidity training and direct field liaison work were carried out during the year. A five-day course on the assignment of international diagnostic codes to hospital morbidity records was held in the Bureau, attended by persons from Federal Government departments, provincial hospital insurance commissions and individual hospitals.

Officers of the Division attended and spoke at a number of meetings, including the Second National Conference on Tuberculosis, the annual meeting of the Alberta Hospital Association, the Statistical Sub-Committee of the Advisory Committee on Mental Health and the Advisory Committee on Epidemiology.

In its work of producing statistics on law enforcement and on the administration of justice, the Division is now governed by Regulations to the Statistics Act approved by the Minister of Trade and Commerce. These Regulations deal with the collection and publication of statistics concerned with police administration, crime, traffic enforcement and criminal records.

The Division produced publications on crimes and traffic enforcement based on reports by police departments; on police administration based on reports by police departments; on criminal and other offences and on juvenile delinquents based on material supplied by adult and juvenile court officials; and a report on correctional statistics based on returns by correctional institutions and the Commissioner of Penitentiaries. In addition, statistical tables were prepared for supplements to the annual reports of the Commissioner of Penitentiaries and the National Parole Board. Three manuals were also prepared, one for the reporting of crime, one for reporting by penitentiaries and another for reporting by training schools.

Papers on the Uniform Crime Reporting Program were given at a number of police meetings throughout Canada. A *Police Records Manual* is being prepared by divisional officers with the co-operation of the Committee on the Uniform Recording of Police Activities. This Manual will assist police department officials in recording information and reporting data to the Bureau.

One difficult reporting problem was the identification of arson and of attempted arson in a way capable of meeting the distinct requirements of the different bodies interested in offences of this nature. The proper reporting method was established during a meeting at the DBS of the Canadian Association of Chiefs of Police and of the Association of Canadian Fire Marshalls; this became effective January 1, 1963. In response to requests by the C.A.C.P., a special one-time survey dealing with thefts of automobiles was set up to take place in May 1963.

Officials in the departments of the Attorneys General of the provinces and in the federal Department of Justice were interviewed by divisional officers during the year in connection with a proposed revision of the methods employed for reporting adult court statistics. A conference on this matter is scheduled for the coming fiscal year.

The juvenile statistics program will remain unchanged until recommendations have been made by the Committee on Juvenile Delinquency of the Minister of Justice. Divisional officers met frequently with members of this Committee which is working on an historical review of juvenile delinquency for which the Division prepared a number of tables.

On April 1, 1962, a revised program of reporting penitentiary statistics was implemented by the Division in co-operation with the penitentiary service to meet statistical and operational needs by use of newly designed forms and supported by a specially prepared reporting manual. As a result of discussions

between divisional officers and officials of the National Parole Board, the statistical parole form was redesigned and the means of forwarding the new form to the Bureau improved.

A new *Training School Statistics Manual* was issued to facilitate the filling in of the training schools admission, release and population forms introduced January 1, 1963, as a result of the Dominion-Provincial Conference on Training School Statistics held at the Bureau in 1961.

INDUSTRY AND MERCHANDISING DIVISION

The Industry and Merchandising Division is responsible for statistics in two important fields of activity: (1) *Industry*, comprising logging, fishing, mining and manufacturing; and (2) *Merchandising and Services*, comprising retailing, wholesaling and the service trades. A comprehensive industrial census is carried out each year, providing data on employment and payrolls, materials and fuels used, value of inventories and details of producers' shipments. More current data on important commodities produced and on total manufacturers' shipments and inventories are provided by appropriate monthly or quarterly surveys. Similarly, a complete census of the merchandising and service trades is made every tenth year, and current estimates of sales and inventories, in total and for important trades, are provided by monthly and annual sample-type surveys. Results of these surveys are published in a regular series of industry, trade and commodity reports—about 225 annuals and 65 monthlies or quarterlies.

In the annual Census of Industry, further progress was made in revising reporting procedures of multi-unit firms on the basis of the new establishment definition. The necessary information on corporate organization and accounting practices was obtained by correspondence, telephone calls and company visits by officers of the Division. A large number of additional reporting problems was revealed by the 1961 Census of Manufactures and the decennial Census of Merchandising and Services. As a result, methods of valuation and the treatment of Manufacturers' Sales Branches had to be investigated in many cases. The original accumulation of problem cases was reduced substantially but a considerable number remained outstanding at the year-end.

A start was made in the implementation of the Standard Commodity Classification in the annual Census of Manufactures. The preliminary work is being carried out jointly with the Central Research and Development Staff in connection with the requirements of the 1961 Input-Output study. Associated with the move toward gradual adoption of standardized commodity definitions, a considerable number of relatively unimportant commodity items were eliminated from the 1962 questionnaires. A number of "medium" type report forms were cancelled for the 1962 Census of Manufactures and, as a result, many establishments were transferred to "short" forms for reporting purposes.

The implementation of the new establishment definition in the 1961 Census of Manufactures affected the continuity of statistics for many establishments, particularly those of multi-unit firms. To provide comparability for a number of years, the statistics for these establishments were recompiled on the 1961 reporting basis for the years 1957-60 and these revised statistics are being published in the 1961 industry reports.

The Inventories Unit also had to spend extra resources on the implementation of the revised Standard Industrial Classification and the new establishment definition. At year-end, the recompilation of the monthly series on manufacturers' shipments, inventories and orders to the revised S.I.C. basis was nearing completion. The results of the 1960 Census of Manufactures, based on the new S.I.C., are being used as benchmarks for the revised monthly series. Associated with this project was the adjustment of reporting procedures in the monthly survey to the new establishment concept. The Inventories Unit participated in the work of investigating the organization and accounting practices of manufacturing firms and arranged, where necessary, for changes in reporting procedures in line with the revised basis of reporting in the annual Census of Manufactures.

In the primary industries, the principal new developments were in forestry where the sample surveys, designed to provide estimates of the cut of primary products on privately owned woodlots, were extended to cover all of Prince Edward Island, Nova Scotia and New Brunswick, and a large part of southern Ontario. Exploratory work was done in Quebec, Manitoba and Alberta. Compilations were completed for the "cut" of wood products on farm woodlots, as enumerated at the time of the decennial Census of Agriculture taken on June 1, 1961. A Federal-Provincial Conference on Forestry Statistics, the first of its kind, was held in Ottawa in March 1963. Divisional officers continued to participate in the activities of the Interdepartmental Advisory Committee on Forestry Statistics. In fisheries, the annual census of fish processing plants was extended to include operators in the Provinces of Ontario, Saskatchewan, Alberta and in the Northwest Territories, as well as the Atlantic Provinces, Quebec and British Columbia. In mineral statistics considerable attention was given to the elimination of differences in the data published by the provinces and by the DBS.

In the area of productivity measurement, progress was made on the calculation of average hours worked figures for the commercial non-farm economy since 1947, and on the development of suitable employment data, from various sources, which match both the average hour and real output series. The principal adjustments consisted of calculating allowances for the shortening work-week by sex and by industry. Work on the numbers employed included the evaluation of factors causing differences between various employment series, *e.g.* turn-over, part-time work, coverage and weighting. Progress was also made on several manufacturing industry studies in order to provide specific productivity series as well as to develop the methods for general use. The problems varied greatly from industry to industry but some of the more important concerned the changing product-mix and quality, the introduction of new products and the difficulties of labour input data. The Productivity Research Section also prepared material for various international agencies and contributed substantially to interdepartmental statistical co-ordination.

Collection and compilation of data on stocks of critical survival materials was extended in co-operation with the Emergency Supply Planning Branch, Department of Defence Production. Tabulation print-outs now provide quarterly data by locations for 61 food items and 87 clothing items. Projects in the development stage involve data on stocks of fish at processing plants, warehouses and cold storage plants; a survey of holdings of about 500 pharmaceutical products; area tabulations of stocks of coal and other fuels; and a survey of capacity and equipment of bakeries.

Work on the 1961 Census of Merchandising and Services was well advanced at the year-end. Following the checking of enumeration documents provided by the 1961 Census of Population enumerators, report forms were prepared and mailed early in 1962 to 150,000 retail stores, 30,000 wholesalers, and 100,000 service trade operators, and by the end of the year collection in all areas was practically complete. Editing of incoming reports was also well advanced and checks completed on the adequacy of enumeration and on businesses which were not in operation at the time of enumeration. Some priority was given to retail trade with the objective of releasing, in June 1963, a preliminary report by kinds of business for Canada and the provinces. More detailed reports on retailing are expected to follow in early Fall, and initial summaries on the service trades and on wholesaling will also appear at that time. A special survey of 20,000 manufacturers' trading outlets to provide data on channels of distribution is also being carried out by the Census staff and it is expected that results will be made available early in 1964. Continuous attention was given during the year to the intercensal program on merchandising and services statistics to be put into effect in 1964 when the basic Census data are available.

INFORMATION AND PUBLIC RELATIONS DIVISION

In recognition of the increasing importance of its functions, the Information and Public Relations Division was created a separate division at the close of the 1961-62 fiscal year.

During the year under review, this new Division served as the focal point for the release and dissemination of the published information of the Dominion Bureau of Statistics. In performing these functions, it published the DBS *Daily* and *Weekly Bulletins* which serve to summarize the publications of the Bureau as they are released. In addition, the Division replied to a large number of enquiries which required the assembling of published statistical information from a variety of sources. In the sphere of public relations, it prepared conference display material promoting DBS services for exhibitions and seminars. The Division published, in co-operation with the Department of Public Printing and Stationery, DBS catalogues of *Current Publications*. At the close of the 1962-63 fiscal year, work on a 1963 revision of the current 1960 catalogue was far advanced and, when completed, will incorporate material from supplemental catalogues issued in the intervening years.

Arrangements were made for several television and radio performances by officers of the Bureau, thus informing the public of the work of the Dominion Bureau of Statistics.

In the 1962-63 fiscal year, the Division was preparing plans to:— (1) develop new promotional programs to expand the sale of DBS publications in co-operation with offices of the Department of Public Printing and Stationery across Canada; (2) find means of expanding newspaper coverage of DBS material by the preparation of press releases supplementary to the *Daily Bulletin*; and (3) publish booklets and brochures which would assist the public to locate their way among the multiplicity of Bureau reports and the material contained therein.

LABOUR DIVISION

The Labour Division consists of three sections: the Unemployment Insurance Section, the Employment Section, and the Labour Income and Research Section. The Unemployment Insurance Section provides the Unemployment Insurance Commission with operational statistics; it also publishes statistics of public interest concerned with persons covered by unemployment insurance and persons claiming benefit. The Employment Section collects industrial establishment records of employment, hours of work and wages and salaries; it publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The employment index numbers are widely used for industry and area analysis of employment changes; per capita data on earnings and hours of work have several uses, the most important of which is perhaps in collective bargaining between labour and management. The Labour Income and Research Section issues labour income estimates giving industry and area totals and undertakes research and analysis pertaining to the general field of labour statistics.

During the 1962-63 fiscal year, the Unemployment Insurance Section continued its regular program of preparing statistics concerning the operation of unemployment insurance. In addition, a number of special projects were undertaken. Senior officers of the Section advised the Unemployment Insurance Commission in the planning of surveys to provide the Royal Commission on Unemployment Insurance with information regarding the contribution record of claimants in the two years prior to the claim, and carried out the processing of the survey results. Assistance was given to a study conducted at Memorial University, Newfoundland, concerning application of unemployment insurance to the fishing industry in that province. This assistance included technical advice on the operation of seasonal benefit and the selection and processing of a sample of claims documents.

For the first time arrangements were made with the Unemployment Insurance Commission to provide a punch card return at book renewal time showing total as well as insured employment. These book renewal punch cards, when coded in DBS, will be used to convert the Unemployment Insurance Commission Employer Index to the new Standard Industrial Classification. In return, the Unemployment Insurance Commission will reproduce for the Bureau a punch card index which can be used for the mechanical selection of establishment samples.

During the course of the year, professional staff of the Section contributed a number of articles and working papers relating to unemployment insurance and labour statistics generally. Several of these were published in the *Canadian Statistical Review* and other Bureau publications.

The Employment Section continued its regular program of preparing statistics of employment, hours and earnings. The monthly survey was tabulated on the computer commencing early in the fiscal year and parallel runs with regular tabulations carried out until mid-year. The computer reduced the amount of clerical time involved in the manual calculation of averages and ratios and made available a much larger number of such calculations on a routine basis for meeting special requests.

A working document for interdepartmental distribution was produced extending the seasonally adjusted employment series for major industry groups. Progress was also made in compiling seasonally adjusted industrial composite indexes for the provinces. It is planned to include these in the monthly publication *Employment and Payrolls*.

The monthly sample survey of employment in small firms was continued and tentative estimates of total industrial employment were compiled for major industries and provinces. As year-to-year comparisons became available and the effect of various collection and compilation methods could be tested, a number of modifications were made to improve response, reduce operational costs and sample variance. An over-all review of the project, including the sample design, is being undertaken prior to releasing the estimates.

Following a study of the effect of their exclusion on published data, establishments of marginal size in the large-firm survey were transferred to either the small-firm survey sample frame or the self-representing sector of this survey. This forestalled an anticipated 5 per cent increase in the number of reporting units.

Substantial progress was made in the long-term major revision project. This project involves the adoption of the revised Standard Industrial Classification and a new standard definition of business establishment, the revision of geographical coding, the transfer of index numbers of employment and payrolls to the 1961 base period and the re-working of historical series on the new base. The planning of computer programs for most aspects of the work was completed and computer runs of preliminary base-year averages produced. More than half of the detailed check of individual establishments was completed.

During the year the Labour Income and Research Section participated in a number of research and development projects. Estimates of total numbers of employees were computed monthly by industry and province using data prepared in the Employment Section and elsewhere. An investigation of methods of improving estimates of numbers of employees in health and education was carried out. Work continued on the project of compiling historical series of estimates for eventual publication. For most of the year, assistance was provided the Employment Section in the processing of small-firm Employment Survey results. Studies of sampling error in these data were also carried out. Monthly estimates of labour income were produced regularly and work was commenced on the decennial revision of labour income estimates.

NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS DIVISION

The sphere of this Division was widened with the transfer of the Balance of Payments Section from the former International Trade Division in April 1962. The responsibilities of the enlarged Division cover the preparation and analysis of the principal Canadian economic accounts and comprehensive indicators which are published regularly. This set of economic statistics is integrated into a related framework from the wide body of Canadian statistics which, for the most part, are collected by other Divisions of the Bureau.

Regular publications include quarterly and annual reports on national accounts and balance of payments, annual reports covering a survey of production, foreign capital invested in Canada and Canadian capital invested abroad, as well as travel between Canada and other countries. Monthly publications include *The Canadian Statistical Review*, *Index of Industrial Production*, *Sales and Purchases of Securities Between Canada and Other Countries*, *Travel Between Canada and Other Countries* and *Travel Between Canada and the United States*. *The Canadian Statistical Review*, with its *Supplements*, is the most comprehensive of the monthly publications, being the medium for presenting a selection of Canadian statistics from the whole range of information encompassed in the various fields covered in the Bureau's activities and from other sources. This publication also contains an article each month reviewing developments in special fields of Canadian statistics and, as well, it is a leading channel for the public presentation of monthly, seasonally adjusted series produced in the Current Business Indicators Section.

A reference paper showing real domestic product by industry of origin was completed by the Industrial Output Section and in the hands of the printers at the year-end. This major piece of research, under way for a number of years, constitutes an extension of the index of industrial production, which covers about one third of the national product, into other industries of the economy. The additional industry divisions covered in the present study extend over the whole range of primary industries and services with considerable component detail. The new indexes are presented in the document for each year over the period from 1935 to 1961 and quarterly from 1946. This reference paper contains an explanation of the conceptual background and the relationship of the series to the national accounts.

Over a period of years the national accounts have been extended into new areas of analysis and new forms of presentation, a development undertaken in response to the requirements of users and the international standards that are accepted goals in the meaningful presentation of economic accounts. With the complex framework of interrelated information that has been developed, there has been a need to appraise the quality of the data produced. During the year under review, close consideration has been given to the available statistics in relation to quality and to their intended uses. Also, with the object of ensuring quality and keeping up with new developments in the economy, extensive relations were maintained with supplying Divisions in the continuous measurement of major elements in the accounts.

To provide a convenient record for most of the postwar period, a special report entitled *National Accounts, Income and Expenditure, by Quarters, 1947 to 1961* was published during the year. In this report there was brought together under one cover the most recent main tables of the national accounts as well as tables developed of late covering government revenue and expenditure, national saving, and seasonally adjusted constant dollar estimates of gross national expenditure.

In the Current Business Indicators Section some special attention was given to a project on the development of historical monthly statistics in response to the need of the Canadian Political Science Association. A new publication was being prepared by this Section with many of the series corrected for seasonality from primary data supplied by many other sources elsewhere in the Bureau including the Industrial Output Section. This is in

addition to the continuing review of existing seasonally adjusted series, the past record of which has been issued in a new annual *Supplement to the Canadian Statistical Review*.

Balance of payments statistics were in special demand because of interest in the results of official measures introduced in the early part of the fiscal year to stabilize the international exchange value of the Canadian dollar and Canada's international transactions. The meeting of such current demands were given priority over some longer-range statistical programs.

Developments under way in recent years continued to be made in the field of recording short-term capital movements and the international money market, facilitating the analysis of the massive movements in this sector of the balance of payments during 1962.

With major changes in the trends in international travel arising from the official measures referred to above, statistics in this field were also in special demand. Among new statistical developments was a special survey of Canadian automobile travel in the United States with the object of supplementing the regular sampling of this group.

From the records of international investments a special study was made of the size distribution of United States-controlled manufacturing enterprises in Canada and also the largest enterprises in Canada, including those controlled in Canada in the fields of petroleum and natural gas, mining and manufacturing. Some of the more salient parts of the study were presented in the *Canadian Statistical Review*. Another extension of statistics in international investments was a new enlarged survey of Canadian holdings of United States stocks through the co-operation of more than four hundred United States corporations.

Officials of the Division participated in preparations for the introduction of the Corporations and Labour Unions Returns Act by which financial statistics of interest in the field of the balance of payments and international investment will be collected.

Relations with the International Monetary Fund and various other international organizations continued to absorb an increasing amount of the time of officers of the Division. These involved participation in meetings in Washington and in Ottawa as well as preparation of special information required of Canada as a member of different international organizations. The Division was represented at international meetings of experts in Europe in the fields of the measurement of industrial production as well as international travel research and at several meetings in both Canada and the United States dealing with the Canadian economic background. In addition, an official of the Division collaborated in the presentation of a paper on *Price Indexes in a Social Accounting Framework* for the Canadian Political Science Association.

PRICES DIVISION

The function of the Division is to collect, compile and publish data on prices and consumer expenditures. The Division consists of five sections: Retail Prices, Consumer Expenditures, Wholesale Prices, Farm Prices and International Prices. The principal emphasis in the prices program is on the construction and publication of price indexes but data on average prices are

also published for selected commodities. Surveys of urban consumer expenditure are conducted biennially to provide a basis for revising the item content and item weights in the Consumer Price Index. The resultant body of material on expenditures of Canadian families is published and is used widely by business organizations and welfare agencies.

The Retail Prices Section completed the final phase of the 1957 revision program for consumer price indexes with publication of revised indexes for ten regional cities, and initial studies were undertaken in the 1962 revision program. Periodic revision of consumer price indexes at approximately five-year intervals are planned. In the 1957 revision, the time base 1949=100 was retained but items included in the index and their weights were up-dated in accordance with family expenditure patterns based on the 1957 family expenditure survey. In the 1962 revision, items and weights will be based on the 1962 expenditure survey and the time base for the national and city indexes will be changed to 1961. In this connection, re-examination of the boundaries of the population group to which the national index relates, in terms of family types, family income and cities, was completed. The re-examination involved analysis of expenditure patterns revealed by the enlarged 1959 survey which covered all families and individuals in cities of 15,000 population or more. Preliminary analysis of the results of the 1962 monthly surveys of expenditures on food was also undertaken.

In addition to the revision work, a progressive review of retail price survey procedures and techniques was carried out to improve the quality of price data in all retail price indexes. A related project was a one-week conference of regional pricing officers which was held in Ottawa in November. The conference program centred on papers prepared in advance by the pricing officers on problems of specific field operations, and included visits to manufacturers in Montreal and a merchandise display in Ottawa designed to clarify specification and identification techniques.

Two surveys of family expenditures were undertaken by the Consumer Expenditures Section, *viz.*, a survey of detailed food expenditures for which weekly diary-type reporting was employed and a survey of the complete family budget in 1962 by a one-time recall interview of the individual family. The field interviews were completed by regional office enumerators. The surveys were designed to provide data for use in revision of the Consumer Price Index and, therefore, were restricted to families of specified size and income in seven major cities. Returns from the food survey were processed monthly throughout 1962 for conventional mechanical tabulation and initial tables became available. For the complete budget survey, a major development was the decision to process and tabulate returns by electronic computer. Although a relatively small number of records was involved, it was considered that the complexity and volume of data on each schedule warranted the change-over to computer processing. Considerable time was invested in compiling the instructions necessary for the transfer of editing routines to the machine and in formulating requests for tabulations in sufficient detail to facilitate speedy publication. It is hoped that this survey will be marked by a substantial improvement in timeliness of published results.

Preliminary release of the previous 1959 survey results was made in May 1962, and the final publication, *Urban Family Expenditure, 1959*, was released

in March 1963. Analyses of unpublished 1959 tabulations proceeded during the year under review and a considerable volume of material was made available to users in answer to special requests.

Apart from the established statistical program, primary emphasis in the Wholesale Prices Section was devoted to advancing the developmental work on industry output and input price indexes which was described in the previous Annual Report of the Dominion Bureau of Statistics. Preliminary steps, including planning and a limited amount of assembling of base weighting data, were taken in connection with rebasing the Industry Selling Price Indexes from a 1956 to a 1961 price reference base.

Increased attention was given to the matter of compensating for "quality" change in price index construction and ideas were exchanged with United States and British authorities. Also, a paper touching on theoretical and practical considerations in this aspect of price indexes was prepared and presented to the Bureau's extra-curricular seminar on productivity measurement.

A start was made on an experimental program concerned with possible systematic interdependence of price behaviour among industries and some tests were made relating to time lags between prices of new orders and shipments.

The Farm Prices Section prepared and published regularly a wide range of price indexes, weekly and monthly, relating to commodities and services used by farmers and farm families, Canadian farm products at terminal markets, sensitive industrial materials, residential and non-residential building materials, common and preferred stocks, and highway construction. Revision and further development of most of the indexes continued.

Initial studies in a comprehensive revision of the Price Index Numbers of Commodities and Services Used by Farmers were begun as some of the prerequisite data from the 1958 Farm Income and Expenditure Survey became available during the year. Variations in farm expense patterns among groups and sub-groups of farms (as classified in the Standard Industrial Classification) are being examined to determine the nature and scope of an adequate system of indexes of prices paid by farmers.

Revised Security Price Indexes on the base 1956=100 were published in June. The major developments in the revised indexes were the classification of stocks according to the Standard Industrial Classification and the use of constant weights for index groups representing each industry. Further development was achieved on the new series Price Indexes of Highway Construction with completion of current-weighted indexes, and a comprehensive reference paper describing in detail both the base-weighted and current-weighted indexes was published in September. In the continuing development of price indexes relating to the cost of construction of electric generating, transmission and distribution facilities, a large volume of cost data supplied by private and public utilities is being analysed and further progress has been made on the price collection and evaluation phase of the project.

In keeping with the requirements of the Canadian Government's foreign service allowance system, the International Prices Section analysed, during the course of the year, living cost surveys from numerous foreign cities to determine appropriate allowance levels for civil servants stationed abroad. In connection with this work the officer in charge of the Section visited national statistical authorities and Canadian overseas staff in many countries of Africa and the Middle East. During the year under review, retail food cost information was received from about 250 isolated locations within Canada. The results of analysis of these reports will be used to assist in the review of Isolation Allowance levels paid to federal civil servants stationed in remote areas. In the same context, the Section has also been studying domestic fuel and utility cost data received from a number of isolated communities.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

This Division consists of five sections: Government Employment and Payrolls, Public Finance, Public Utilities, Research Projects and Transportation. Its function is to collect and publish data on the financial structure of the three levels of government in Canada with details on numbers employed and payrolls, the performance and financial condition of rail, road, water and air transport, the financial and operational aspects of electric power, gas and oil pipelines, and financial and operational information concerning the various communications media.

During the year, the Government Employment and Payrolls Section prepared, in addition to its regular publications, a number of tabulations for the Pay Research Bureau of the Civil Service Commission. Responsibility for the production of manpower statistics to be used by the Treasury Board and other central agencies of the Federal Government was assigned to this Section as were the surveys of casual and certified sick leave taken by government employees.

The development of computer programming applications to the survey of Federal Government employment commenced with the conversion of punch card records to computer tape and the production of a set of summary cards. Need for a centralized control over all records involving government employees as well as revisions in the system of recording employee and position changes were discussed with Civil Service Commission officers.

Special tabulations involving data on employees and former employees of the Government of Canada, covering such details as deductions for pension plans and amounts paid to persons in receipt of superannuation, were prepared for the National Accounts Division of the Bureau and special analyses relating to a limited number of classes of prevailing rate employees were prepared for the Department of Labour.

In the Public Finance Section, considerable progress was made in the initial analysis of provincial government enterprise finances for the years 1958 to 1961. In addition to the Section's regular publications, the first issue of *Financial Statistics of Federal Government Enterprises* for 1958, 1959 and 1960 was released. Data on sales, by stores, were collected from six liquor boards and forwarded to the Industry and Merchandising Division.

This Section provided the Department of Finance with details of certain items to be used in the calculation of the tax equalization payments by the Federal Government to the provinces in the period April 1, 1962 to March 31, 1967, under the Federal-Provincial Fiscal Arrangements Act.

Data on municipal direct and indirect debenture debt and details on the numerous adjustments of Federal Government budgetary revenue and expenditure were supplied to the Bank of Canada. In addition, special compilations on government finances were prepared for the Royal Commission on Banking and Finance, the Royal Commission on Health Services, the Historical Statistics for Canada and the Canadian Tax Foundation.

Discussions with the Department of Finance and other interested agencies were initiated to determine the implications of the recommendation of the Glassco Commission concerning the form of presentation of Federal Budgetary Estimates. Arrangements are being made to collect financial data relating to provincial crop insurance schemes for the Department of Agriculture and other divisions of DBS on a composite reporting form. Receipt of detailed information from the Province of Quebec has improved data on provincial government capital and repair expenditures and other gaps in the various provincial statistical series are expected to be remedied following outlines of scope and coverage prepared for the Quebec Bureau of Statistics. A study of "errors" in the quarterly estimates of government expenditures on goods and services and an analysis of indirect taxes less subsidies were undertaken at the request of the Assistant Dominion Statistician for Statistical Integration.

The Public Utilities Section continued its program to improve the collection and quality of its pipeline transport, electricity, natural gas distribution and communication statistics. The most important development during the year was the inauguration of a program to establish joint collection of oil pipeline monthly statistics involving provincial governments, the National Energy Board and the Dominion Bureau of Statistics. Following meetings with industry a program for the collection of quarterly financial data was inaugurated involving the National Energy Board, the Business Finance Division and the Public Utilities Section. Joint collection in gas utilities was extended to include an integrated joint compilation program between the Section and the provinces.

During the year a program was initiated to review the telephone statistics series. A National Advisory Committee on Telephone Statistics was established in late December. Joint collection arrangements with the Department of Transport and the Board of Broadcast Governors for radio and television statistics were in satisfactory operation during the year. A federal-industry committee was established, known as the National Advisory Committee on Broadcasting Statistics, and chaired by an officer of the Bureau.

The Public Utilities Section was, during the year, involved in two additional committee projects, both *ad hoc* committees of the Interdepartmental Advisory Committee on Energy Statistics and respectively engaged in producing a standard pressure base for reporting of natural gas statistics and in studying revisions of the electric power statistics reporting forms to meet needs of the National Energy Board, Department of Mines and Technical Surveys and the Department of Northern Affairs and National Resources.

In the Transportation Section, further progress was made toward the development of comprehensive transportation statistics. Estimates of intercity ton miles by mode of transport were revised and published in the *DBS Daily Bulletin* of February 4, 1963, and include the actual estimates of water ton miles for the years 1960 and 1961, improvements in the coverage of air freight ton miles and gas pipe line ton miles. Corresponding estimates of intercity passenger miles by mode of transport were also released in a recent issue of the *DBS Daily Bulletin*. Favourable discussions were held with senior representatives of the railway, airline and trucking industries regarding the feasibility of setting up a National Advisory Committee on Transportation Statistics.

The Standard Industrial Classification code numbers for the various transport series were changed to conform with the revised Standard Industrial Classification. Meetings took place with officials of the United States Government concerning a uniform classification of commodities for such purposes as production statistics, imports and exports as well as transportation. As a result, some changes will be made in both the American and Canadian classifications which will enable convertibility from one to the other with about 95 per cent effectiveness. However, in the case of the commodity information contained in the annual report *Railway Freight Traffic*, data will continue to be based on the uniform classification of commodities as prescribed by the Association of American Railroads. The Bureau has, therefore, converted the 1961 commodity data from this report to the Standard Commodity Classification by publishing a special report for distribution to subscribers to the regular publication.

A Committee consisting of representatives of the Canadian National and Canadian Pacific Railways, the Board of Transport Commissioners and the Chief of the Transportation Section as Chairman, was formed to review and revise the "Classification of Railway Employees and their Compensation". Considerable progress was made and all agencies formally adopted the recommended structural changes in this classification.

The 1962 *Civil Aviation* publication was expanded to include information on aircraft fleets, showing a breakdown by fleet ownership, number of engines, categories and weight groups of aircraft. Arrangements are being made with the Department of Transport and the Air Transport Board to obtain the number of passengers and the tonnage of freight carried by foreign air carriers licensed to operate non-scheduled unit toll and charter services between Canada and other countries.

Two new volumes—Part IV and Part V—of the *Shipping Report* were produced. Part IV contains the origin and destination of all foreign and coast-wise cargoes handled at the eight largest Canadian ports; similar data for the seventeen next largest ports are available on request. Part V contains traffic flow data for eight specific commodities which move in large volume by water. In addition, water ton miles covering all domestic shipping and segments of foreign shipping were compiled for the years 1960 and 1961. In co-operation with the Ship Owners and Ship Builders Association, the annual Water Transportation reporting forms were completely redesigned and instructions amended.

A complete review of the Motor Transport Traffic Survey was undertaken with the assistance of the Sampling Consultation Staff. The annual publication *Motor Carrier Freight* was split into two reports in order to improve timeliness. A *Motor Carrier Freight* quarterly report was introduced and a pilot survey covering operators in Ontario was conducted in the third quarter of 1962, with Quebec operators added in the last quarter of the year and the other provinces included in 1963. In the annual *Urban Transit* report, a provincial breakdown was introduced in place of individual company data. Arrangements were made to collect additional information on refrigerated storage facilities in Canada, on an annual and quarterly basis, for the Economics Branch of the Department of Agriculture.

A number of special studies were prepared during the year: an analysis of commercial motor vehicles by motor power and class of operation; an analysis of the motor transport traffic survey to show motor vehicles by model and by province; a study of the results of the motor transport traffic survey in Ontario covering the period 1956-60 for the Automotive Transport Association of Ontario; a similar study for Quebec for the period 1957-61 for the Quebec Trucking Association; and special tabulations for the North Atlantic Ice Patrol Committee, the Port Administration Authorities of Halifax and Saint John, the Quebec Bureau of Statistics and the British Columbia branch of the National Research Council.

SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for all field activities of the Dominion Bureau of Statistics. Current information on many topics is obtained by temporary enumerators, working under the supervision of the different Regional Offices, who interview each month a scientifically selected sample of approximately 36,000 households across the country.

Each month questions on labour force activity are asked and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five main regions of the country. At the same time, enumerators inquire about rents paid and the information elicited is used to compile the rent components of the Consumer Price Index.

In addition, a variety of other information is obtained from time to time. An annual bulletin entitled *Household Facilities and Equipment* results from special questions asked in May of each year and provides information on the facilities and equipment present in Canadian homes. During 1962 special questions dealt with personal incomes, annual employment patterns and immigration. A monthly food expenditure survey was conducted to obtain from representative families their patterns of food expenditure throughout the year. Some 1,800 families co-operated by keeping a four-week record of their food expenditures. A family expenditure survey was conducted during February and March 1963, in which approximately 1,200 families provided details of their 1962 income and expenditures on accommodation, home furnishings, clothing, personal care, medical care and recreation.

As part of their continuing duties, the Regional Offices collect data on retail prices of commodities for use in compiling the Consumer Price Index. They also maintain, for the convenience of local business firms and others, a file of all current DBS publications. The collection of business reports, which other Divisions of the Bureau have not been able to obtain by mail, is also carried out through these offices. In connection with the 1961 Census of Merchandising and Service Establishments, the Regional Offices were assigned the special task of collecting approximately 25,000 outstanding reports.

During 1962 preparatory work was carried out and detailed information was assembled from the 1961 Census which will permit significant progress during the 1963-64 fiscal year in the redesign of the Labour Force sample of households.

DATA PROCESSING SERVICES

The large-scale processing of statistical data at the Dominion Bureau of Statistics is undertaken by the Tabulating Services Division in conjunction with the Central Programming Staff. The two Divisions work together to improve the processing services of the Bureau using the equipment most suitable for the purpose.

Central Programming Staff

The function of the Central Programming Staff is to provide assistance and direction to subject-matter divisions of the Bureau in assessing the feasibility of processing their data on the electronic computer systems. The review includes alternate data-processing methods with the object of selecting the best method possible for each job. For applications assigned to the computer, the programming staff then writes and tests the programs and, when these are in production, up-dates them to take care of changing data and statistical requirements.

The staff is organized into five teams each headed by a senior programmer assisted by three to five junior programmers. The senior programmer works closely with the subject-matter officers in defining the problem and in outlining and flow-charting the method of processing. Parts of the problem are then assigned to junior programmers who prepare the detailed instructions for the computer. A few programmers work independently on special projects, analysis and development work.

The programming staff works closely with other service and research divisions of the Bureau to develop the most efficient data processing methods for the Bureau as a whole. In particular, the Tabulating Services Division and the programming staff co-operate to produce integrated data processing systems. A case in point is the preparation of programs for the 1401 computer which combines data from several punched card files, performs certain calculations and punches out summary cards in a form easily handled by unit-record equipment.

In the field of statistical integration, the programming staff has offered suggestions for the structure of numeric codes to be appended to standard

classifications, geographic divisions and standard list of respondents. These codes are designed to simplify and speed up data-processing operations, particularly those of the electronic computer.

By the end of March 1963, all programs for processing the 1961 Decennial Census had been completed and tested for agriculture, family, household and housing tabulations and programs for population and labour force tabulations were almost completed. During the year, efforts were concentrated on developing methods and writing programs for income, migration and fertility studies of census data, for quality control of the census data, and to meet demands for data to be used in monographs and other special studies.

As new data requirements arise for programs already in production, these are reviewed and brought up to date. For instance, programs for processing import statistics are constantly changed to handle new classifications and groupings of commodities and changes in ports of entry. Further processing of the yearly pay research program has been transferred to the 1401 computer and additional programs for the 1958 Farm Expenditures and Income Survey have also been written and tested.

During the year, programmers worked with Bureau officers in analysing data requirements and writing programs to process hospital statistics, morbidity, tourist traffic and federal employment data. Analysis and planning for the transfer of principle statistics of the Census of Manufacturing to the electronic computer and for processing the index of production were started. Programs were written to assist in the preparation of the farm mailing list where data from several sources were matched up by the computer and cards punched. These cards were then converted to punched paper tape from which addressograph plates were embossed without further manual intervention. Work on the urban family expenditure survey was also in progress.

In connection with rebasing Bureau statistics to a 1961 base period, the programming staff co-operated with subject-matter divisions in preparing base data for 1961. Employment and payroll base data were calculated and plans for the production of other 1961 base data were in progress. A special project to evaluate the federal superannuation fund for the Department of Insurance was also undertaken.

The Central Programming Staff collaborated with the Tabulating Services Division, Forms Control, and with the Training Officer in preparing and delivering a series of lectures on data processing in the Bureau. The object of the course was to acquaint technical and professional personnel with the data-processing facilities available in the Bureau and with the analysis, planning, review and evaluation necessary to determine the best combination of data-processing methods for a job.

Tabulating Services Division

The subject-matter divisions of the Bureau gather data which form the basis for statistical tables. The Tabulating Services Division provides a service, using a variety of tabulating methods, to process the data reducing it to more manageable form for further analysis. Broadly speaking, there are three main methods of tabulation, and computer processing.

When aggregates only are required involving a minimum of cross-classification, these are produced directly as a clerical operation by means of peg-bar methods of compilation using comptometers and desk calculators. This group, comprising 25 operators, handles a considerable volume, particularly of data where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work. This group also undertakes special projects involving more complicated calculations. During 1962-63 there was a considerable extension of services in this direction.

Next in order of complexity from a tabulation point of view are the many Bureau projects involving more difficult manipulation of the data and a larger number of more complex cross-classifications. For these the Division uses a wide variety of unit record equipment. More than 100 operators record the data from the source documents onto punch cards, about one half of them punching the cards and the other half verifying them, independently, for accuracy. Another group of some 60 operators use other punch card equipment, such as sorters, tabulators, reproducers and collators, to group the punch cards by the various characteristics of the data and to produce in printed form the totals required.

One important feature of punch card tabulation which has been developed to a high degree of efficiency in the Division has been the editing of the data by mechanical means, seeking out inconsistencies which may arise through misinterpretation of instructions and definitions governing the collection of data and through errors in recording answers. Such inconsistencies and errors are detected and corrected before the data are used on the computer where incorrect material could cause halts and re-runs, expensive both in time and money.

To handle the most complex applications, an Electronic Computing Centre was established in 1961 in the Dominion Bureau of Statistics. Although the greater part of the time of the computer has been allocated to the work of the Bureau owing to the needs of the 1961 Census, some of the requirements of other government departments and agencies have been accommodated. Priorities in the use of the equipment are assigned by the Interdepartmental Committee on Electronic Computers. The installation of the Centre consists of an IBM 705 System and an IBM 1401 System, the latter being used principally as an input and output device for the former. However, during the year, the capacity of the IBM 1401 System was increased to permit more extensive handling of complete computer applications, including projects formerly handled on the unit record equipment in a less effective manner.

The application which absorbed most of the computer time during the year under review was the processing of the 1961 Census. The information was recorded on magnetic tape which was then used directly by the computer installation to check out the information and prepare the tabulations. The use of a computer rather than the unit record equipment facilitated the cross-classification of data and improved the quality of statistics. It also meant that the volume of the tabulations was increased beyond that available from any previous census.

For most of the year the computer centre was operated on a three-shift, five-day week basis with some overtime on week-ends. Commencing in March 1963, this was extended to a seven-day week, 24-hour day operation and

plans were made to continue on this basis for at least a year. In addition, arrangements were made to use the facilities of the computer installation in the Taxation Branch of the Department of National Revenue to assist with census work and other Bureau projects.

At the request of the External Aid Office, the Planning Officer in the Division analysed the balance of the tabulation plans for the Census of Ghana. Following recommendations resulting therefrom, the project was reduced to more manageable proportions and a procedure set out for its accomplishment. In February, the Planning Officer left on a three-month assignment to Ghana to assist in getting this phase of the work under way.

During the year, a number of regular projects were re-examined from the point of view of making the most effective use of the equipment available, including the computer installation. As well as projects being exclusively unit record applications or computer applications, it was found that some projects could be completed more effectively by a combination of methods. One of these was the tabulation of statistics relating to tourists formerly accomplished partly on the computer installation and partly on the unit record equipment. A second was the tabulation of the monthly labour force survey and a third, the tabulation of the extensive material requested by the Pay Research Bureau of the Civil Service Commission. It thus appeared profitable to extend this integration of processing methods to a number of other applications.

As in the past, a number of projects were undertaken during the year for other Government departments and agencies on a cost-reimbursement basis under individual agreements; the major special project was the processing of the Sport Fishing and Hunting Survey for the Department of Northern Affairs and National Resources.

ADMINISTRATIVE SERVICES

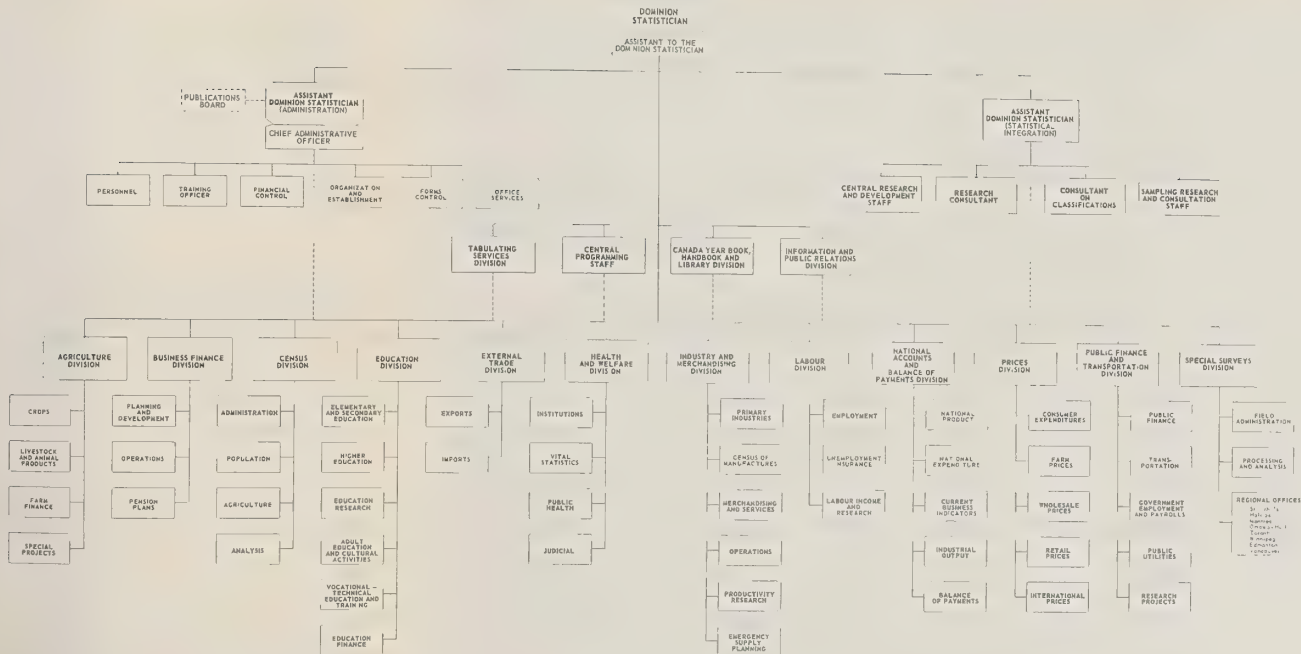
Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general administration, staff organization, financial control and publications distribution, forms control and office services such as the addressograph unit, composing and drafting units, stenographic pool, supplies, mail and messenger services.

Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel and Organization and Establishment Sections. In carrying out these functions it is necessary to maintain close liaison with the Civil Service Commission on recruitment, pay, promotions, transfer and related matters. Staff training activities, initiated the previous year, were continued.

The DBS staff employed on continuing operations at March 31, 1963 numbered 1,797, a decrease of 20 from the number employed on March 31, 1962. Because of the Government's emergency financial measures, no recruitment was permitted during the period June 28, 1962 to January 2, 1963. During

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION



DOMINION BUREAU OF STATISTICS

Chart showing organization

March 31, 1963

the year under review, 16 statisticians and economists were recruited and 11 separated. There were 27 research assistants engaged on summer projects. Throughout the year, 166 promotional competitions were conducted. The 1961 Census temporary staff at Head Office, which numbered 330 on March 31, 1962, was reduced to 279 by March 31, 1963. The establishment authorized for the fiscal year under review was 1,863 positions and 106¾ man-years of casual clerical assistance for continuing operations and 292 man-years for 1961 Census processing.

In order to institute the separate administration of the Corporations and Labour Unions Returns Act, promulgated on January 1, 1963, 52 continuing positions and 2½ man-years casual assistance were assigned to the CALURA establishment. This Act is administered by the Dominion Statistician as an entirely separate organization.

The Health Unit, a branch of the Civil Service Health Division of the Department of National Health and Welfare, continued to provide an occupational nursing service for employees.

Suggestion Awards

During the fiscal year, 46 suggestions from DBS employees were received and evaluated by the Suggestion Award Committee, five of which were granted awards. In addition, 32 suggestions received from other departments of the Government were evaluated as to possible implementation in Bureau operations.

Financial Control

This Section is responsible for the financial operations of the Dominion Bureau of Statistics. These include the preparation of estimates, examining and controlling expenditures, interpretation of financial regulations, compiling cost records, factual reports and the preparation of submissions of a financial order to the Treasury Board.

The volume of work in the Publications Distribution Unit continued to increase during the year as a result of the release of 1961 Census publications and an increase in publicity by the Information and Public Relations Division. Almost 12,000 subscriptions to the 546 DBS publications were serviced involving the distribution of some 1,835,000 individual reports.

Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications, which resulted in savings of both time and material.

During the year under review, the Forms Control processed 2,800 forms consisting of 7,650 pages, excluding miscellaneous forms required for the 1961 Census. Of these 980 pages were reprints, 5,470 were revisions and 1,200 were designed or redesigned. For use in the 1961 Census of Canada, 188 forms were processed totalling 1,170 pages of which 170 were reprints,

25 pages revised and 975 designed or redesigned. Envelopes numbering 160 were also printed, revised or redesigned, as well as 235 specialty forms printed.

In addition, the Section prepared questionnaires and related forms for the Corporations and Labour Unions Returns Act Administration. Assistance was given in planning a computer feasibility course for professional staff and a work study course for supervisory clerical staff for which an outline specifically tailored to DBS requirements was printed. Preliminary studies toward development of a system of processing codes, based on the Standard Commodity Classification codes, were undertaken to facilitate computer processing of commodity statistics.

Office Services

In the Addressograph Sub-Unit of the Office Services Section, 11,073,805 forms were addressed for the various divisions of the Bureau. In addition, 683,616 plates were embossed, 123,128 plates corrected and 417,572 plates deleted.

The Composing Unit planned, varityped and prepared for printing 12,925 pages of tabular and textual material. In addition, 6,405 hours were devoted to miscellaneous vari-typing of forms. Based on the current general average of 1.5 hours per page, this represents a theoretical production of 4,270 pages of publication, bringing the Unit's total production to 17,195 pages.

The Drafting Unit completed 1,896 economic charts, maps, diagrams and various illustrations, in addition to the ruling of tables for the Composing Unit which totalled 9,456.

The outgoing mail numbered 19,923 bags, containing approximately 6,031,655 pieces of mail.

In addition to supplying stenographic and typing services to the various Divisions of the Bureau, the Stenographic Pool provided members of the staff on a loan basis to Divisions for 92 days. A total of 22,616 pages were typed of which 11,396 were photocopy and paper master, and 11,220 were drafts, statements and lists. Letters transcribed from dictation numbered 2,239. As well as the foregoing, 96,736 forms, envelopes and form letters were completed and prepared for mailing.

During the period under review, 6,363 requisitions for contact and Xerox duplicating were received and completed involving a total of 227,378 prints.

The Supplies Sub-Unit received from the Department of Public Printing and Stationery materials for a value of \$302,778. Requisitions numbering 400 were completed for goods and services for which the Department of Public Works is responsible.



ANNUAL REPORT

Canada. Statistics. Bureau of.



Statistician

DOMINION BUREAU OF STATISTICS

For the Fiscal Year ended March 31, 1964

*Annual
Report*

CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1964

June 1964
1101-502

Price: 40 cents

*To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1964.

Respectfully submitted,

A handwritten signature in dark ink, reading "Mitchell Sharp". The signature is written in a cursive, flowing style with a large initial 'M' and a long, sweeping underline.

Minister of Trade and Commerce

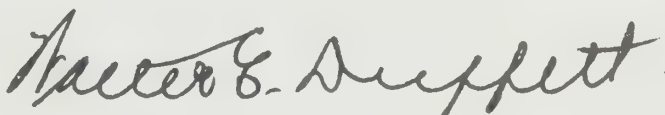
Ottawa, Canada
June 1964.

*THE HONOURABLE MITCHELL SHARP,
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.*

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1964.

Your obedient servant,

A handwritten signature in dark ink, reading "Hector G. Duffett". The signature is written in a cursive style with a large, stylized initial 'H' and a long, sweeping underline.

Dominion Statistician

Ottawa, Canada
June, 1964.

GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's activities in the Dominion Bureau of Statistics as well as certain operations closely associated with the office of the Dominion Statistician. Subsequent sections deal with the work of subject-matter and service divisions.

The Government of Canada was host to the 34th Session of the International Statistical Institute which met in Ottawa from August 21 to 29, 1963. Concurrently meetings were held of the Institute of Mathematical Statistics and the International Union for the Scientific Study of Population. The Canadian Organizing Committee, whose membership comprised leaders of Canadian science, education, labour, commerce and government, under the chairmanship of the Dominion Statistician, was responsible for all arrangements for the Conference. It was gratifying that 780 persons registered, some bringing their families, making a total attendance of 1,024, from 46 countries. The scientific meetings, twenty-four in number, took place at Carleton University, Ottawa. The Proceedings will be published in two volumes.

Mr. J. T. Marshall, Assistant Dominion Statistician, retired in May 1963. Mr. H. L. Allen was appointed in his place as Assistant Dominion Statistician (Administration) and Mr. L. E. Rowebottom became Assistant Dominion Statistician (General Assignments). Dr. S. A. Goldberg is Assistant Dominion Statistician in charge of statistical integration.

In recognition of the two comprehensive and important functions covered, the former Industry and Merchandising Division has been divided into two separate divisions—the Industry Division and the Merchandising and Services Division. In addition to statistics in the fields of manufacturing and primary industries and the development of productivity measures, the Industry Division assumed responsibility for a wider range of the energy field with the transfer of statistics of pipelines and electric and gas utilities from the Public Finance and Transportation Division.

Portions of the report of the Royal Commission on Government Organization that were relevant to the operation of the Bureau were studied by officials and a number of administrative improvements were effected as a result. In line with the Commission's recommendations, which drew attention to the growing importance of statistics in decision-making in government and business, the Bureau hopes to expand and strengthen its contacts and public relations in order to improve the collection of data. The Government has accepted, in principle, a number of recommendations of the Commission relating to statistical matters and others are under study.

The processing of the main body of the results of the 1961 Census of Population, Housing and Agriculture was completed. The use of the computer installation has made it possible to prepare a greater wealth of detail than in any of the previous censuses. Tabulation of the sample survey of migration, fertility and income is proceeding as is the series of analytical monographs on the social and economic life of Canada as indicated in the census information. Plans are underway for a 1966 Census of Population and Agriculture, and preparations are being made for a test of the questionnaire to be carried out in the Fall of 1964.

There was during the year a notable acceleration in statistical needs of federal government departments and agencies and of provincial governments. At the federal level the National Economic Council and the Department of Industry were both engaged in defining their statistical needs, which are proving to be extensive, involving special statistical studies and, in some cases, the loan of DBS staff. Provinces, municipalities and research organizations all have rapidly growing requirements for regional and urban statistics. Careful study is being given to the best means of meeting these requirements for regional and area statistics and co-operative arrangements with a number of provinces have been extended to facilitate joint collection of data and to avoid duplication.

A number of additional positions were authorized in the course of the year. As of April 1, 1964, a further increase in the establishment became effective. The recruitment of experienced staff remains a difficult problem.

The statistical program described above and referred to in some detail in the balance of this report depended heavily for its success on the skill and devotion of the Bureau staff. In a situation where the demand for statistical information has involved great pressure, the DBS staff have been unstinting in their support.

CENTRAL STAFFS

During the year much time has been devoted to various interdivisional activities by members of the newly formed Central Classification Staff, the Research and Development Staff and the Sampling and Survey Research Staff. Discussions have been initiated with the aim of strengthening interdivisional communication and obtaining consistent implementation of definitions, methodology, nomenclature and classification. Comprehensive studies have been carried out, in collaboration with officers of the National Accounts and Balance of Payments Division, on the reliability of the annual and quarterly national accounts. Assistance has been given to the Royal Commissions on Taxation, Health Services and Banking and Finance by providing special tabulations and advising on research problems. The census monograph program has been carried forward. One staff member has been on loan part-time to the Economic Council to carry out analyses of manpower and employment, while another was loaned to the Government of Ghana to set up an Institute of Statistics there. The activities of staff members are discussed in greater detail below:

Central Classification Staff

A change in organization has taken place whereby the central DBS list of companies and establishments, formerly located in the Business Finance Division, has been transferred to a newly formed Central Classification Staff, which reports to the Consultant on Classification whose designation has been changed to "Director". This change has been made in recognition of the Bureau-wide nature of the services provided, the enlarged scope and complexity of the various classification systems—commodity, geographical, occupational, and industrial (company as well as establishment)—and the growing requirements for comparable or integrated statistical series.

The development of the central DBS list of companies and establishments has continued and notable advances made. The system of identification by numbers by which establishments of multi-establishment firms are linked has been adopted for the list of respondents on the Monthly Employment and Earnings Survey. It is planned that the same numbers will be used for the Census of Manufactures within the next year and eventually they will be applied on all regular surveys obtaining data from establishments and companies.

Implementation of the revised Standard Industrial Classification is continuing. Much work has been done in co-operation with subject-matter divisions to ensure uniform application of the classification. Particular attention is being paid to the provision of data that will permit the maintenance of historical continuity in time series despite changes in classification and concept.

A revised Geographical Classification derived from the 1961 Census and providing code numbers for provinces, counties or census divisions, rural and urban municipalities, greater cities and census metropolitan areas, is ready for distribution. The classification system is designed for statistical purposes and can serve to standardize geographical coding on all surveys.

An up-to-date alphabetical index to the Standard Commodity Classification Manual (i.e. Volume III) was published late in 1963 in preparation for the introduction of the new Import Commodity Classification based upon the SCC. Development of the Standard Commodity Classification and programs for its implementation in additional fields are continuing.

Central Research and Development Staff

Two organizational changes included the transfer of the Co-ordinator of Energy Statistics to the Industry Division and the project on national wealth to the Business Finance Division.

Developmental work continued on the overall program of financial statistics. There are many difficult problems of definition, techniques and format, and some of these have received attention. Major progress has been made in the area of corporation financial statistics. With the development of the quarterly survey of corporation balance sheets, and the advent of the Corporation and Labour Unions Returns Act Administration, increased emphasis is being put on company statistics. A number of problems related to the definition and classification of companies were considered and agreement reached. Plans were laid for computer runs which will link together some of the available information on companies and their establishments, and greatly improve the analysis of corporate activity.

This work will culminate eventually in the regular preparation of national money flows tables. Although many gaps still remain, studies have begun on the most suitable conceptual and classification framework for the production of such tables. The approach being followed is to create a decentralized administration whereby parts of the tables are produced in the subject-matter divisions with the Central Research and Development Staff responsible for co-ordinating the work and putting together the parts into a complete table.

Preliminary results of the 1962 Survey of Consumer Finances were released in 1963. The main report will be issued in mid-1964. Tabulation of the 1961 Census statistics on income has begun and three preliminary reports have already been issued. The first two reports of the six to be released in Volume IV have been completed and should be in print by mid-1964. The remaining four reports will be released in the second half of 1964. A number of research projects such as quality checks of the 1961 Census income data were started. It is hoped to complete these projects over the next two years.

Planning of another Survey of Consumer Finances was completed and field operations started in March 1964. This survey, like the 1956 and 1959 surveys, collected data on consumer assets and liabilities as well as on income. A new feature is a special detailed questionnaire on stock ownership. This is the first attempt in Canada to obtain extensive information on the amount and nature of corporate equities held by the household sector. Planning of a report on farm family income, based on the 1958 Farm Income and Expenditure Survey, was started and it is hoped to publish the report in 1964.

Plans for the construction of the 1961 Input-Output Table were completed during the months of April and May 1963 and actual compilation of the Table was started in June. Two special surveys, one on containers used and another on selected operating expenses, were designed and sent out to a sample of business firms. The response to date on both surveys has been satisfactory. A study to obtain a breakdown of corporation profits on an establishment basis using computer techniques was initiated. This study, which is required for the Input-Output Table, will be carried out jointly with several subject-matter divisions.

Various projects designed to measure commodity flows from sources of production to use in production were initiated. In addition to utilizing the information which is available in the Bureau on materials used, produced, imported and exported, the Input-Output Staff is co-operating with the Departments of Defence Production and Industry on studies to ascertain the commodity content of federal government purchases and the materials used by certain industries. This work led to a series of meetings with the Department of Industry which resulted in the establishment of formal liaison channels between the Department of Industry and the Dominion Bureau of Statistics on matters of mutual interest.

Meetings and exchanges of reports on area statistics have taken place with provincial authorities and other interested agencies. A meeting of the Subcommittee of the Dominion Provincial Conference on Economic Statistics took place in January 1964. A pilot study was carried out involving the application of computer techniques to deriving homogeneous regions for statistical purposes.

An experimental study has been undertaken aiming to explore the possibility of making quarterly estimates of unemployment, by province, on the basis of unemployment insurance and related data. Studies have been undertaken, designed to improve the methods of seasonal adjustment and to produce a computer program, which would be sufficiently flexible to yield not only population projections but also life tables and graduated single years of age

distributions, as by-products. Consultation was provided on demographic research and numerous problems including collection, processing and tabulation of population, vital and accident statistics.

Sampling and Survey Research Staff

Besides sampling and assistance on mathematical aspects of various projects the functions of this Staff have expanded to include quality control, response research, the design of experiments and research into survey methodology. Accordingly the designation of the Staff has been changed to the above title. The designation "mathematical adviser" has been substituted by "director".

During the past year the Staff was engaged in designing or redesigning an increasing number of surveys. In each case the primary objective was to improve the reliability of the statistics produced by the survey and/or to reduce the cost of the operations.

The redesign of the Labour Force Survey, an operation carried out jointly with the Special Surveys Division, has progressed according to schedule. A complex mathematical model of the survey was used to good effect to assist in the determination of the optimum sampling ratios for Alberta, Quebec and the Maritimes. The new sample design was successfully tested in Alberta confirming the expectation that substantial gains in the reliability of the statistics may be made using the new design. In co-operation with the Special Surveys Division, a senior member of the Staff and some supporting personnel was working full-time on the preparation of the new sample (stratification, maps, calculation of sampling ratios, instructions, etc.). Specifications were prepared for a computer program to produce the monthly estimates under the new design. Specifications were also prepared for another computer program to calculate the sampling variability of the monthly estimates as well as those of the estimated month-to-month changes.

Work was begun on the development of a new sample design for the monthly Retail Sales Survey, based on 1961 Census data. The new sample is due to be introduced during the first half of the next fiscal year. The main objective of the new design is to provide statistically valid monthly estimates for approximately 30 trade groups by province. Specifications were prepared for a computer program to select the new sample and for another program to prepare monthly estimates based on the new sample.

Final reports have been prepared on the Quality Analysis Projects associated with the 1961 Census of Population. One of these studies provides estimates of the completeness of the population counts, the other analyses the effect of errors in response on the final census estimates. These studies may have important implications for the 1971 Census of Population. Further studies in this direction have been planned in conjunction with the 1966 Census. A paper on this topic was read at the 34th Session of the International Statistical Institute and another paper was submitted for publication in the Journal of the American Statistical Association.

A detailed review of the Motor Transport Traffic Survey, which is conducted by the Public Finance and Transportation Division, has been completed. Recommendations were made for extensive revisions in sample design, data

processing and estimation procedures. These recommendations have been implemented and will result in substantial gains both with respect to the reliability of the statistics and the efficiency of the survey operation. Work was begun on a similar review of the monthly sample survey of employment in small firms, conducted by the Labour Division.

A study was undertaken concerning the feasibility of replacing hundred per cent verification (checking) of punch cards by sample verification. The present practice of the Tabulating Services Division is to verify every punched card. The study indicates that the standard techniques of industrial quality control can profitably be applied to the punching operation, effecting a considerable reduction of the amount of time spent in verifying. The best plan for sample verification has been outlined and a recommendation was made concerning its adoption.

During the last year the Director of the Staff has spent considerable time assisting in the establishment of the Scientific Programming Unit. The work of the Staff has become increasingly dependent on the use of the computer and hence on the work of mathematically oriented programmers. The co-ordination of the work of the Sampling and Survey Research Staff and the Scientific Programming Unit of the Central Programming Division will be of continuing concern to the respective Directors.

Consulting services were extended to a majority of the divisions of the Bureau as well as to several other departments and agencies, such as the Departments of Agriculture; Finance; Fisheries; Forestry; Labour; Mines and Technical Surveys; National Health and Welfare; Post Office; Public Works and Transport; the Air Transport Board; the Bank of Canada; the Central Mortgage and Housing Corporation; the Civil Service Commission.

AGRICULTURE DIVISION

The Agriculture Division is responsible for the development and co-ordination of an integrated program of agricultural statistics, including the collection, compilation and publication of current statistical data relating to all phases of the agricultural industry. Although much of the data related to the program is collected by a number of other divisions of the Dominion Bureau of Statistics, by provincial governments and the Canada Department of Agriculture, the Agriculture Division assembles such data for statistical analyses and publication.

The specific role of the Division in the collection of statistics is to conduct numerous farm sample surveys (annual, monthly or seasonal) from which are derived estimates of the acreage and production of crops, number and production of the various kinds of livestock and poultry, as well as farm prices and wage rates. It also conducts full-coverage surveys at the manufacturing or wholesale level for production and stocks of a number of agricultural products and co-operates directly with the provinces and other agencies in the conduct of certain farm and industry surveys.

A federal Interdepartmental Committee, with commodity subcommittees, and an annual Dominion-Provincial Conference on Agricultural Statistics, facilitate the co-ordination of the statistical program. The Dominion-Provincial Conference held in February 1964 was devoted primarily to a discussion of the proposed questionnaire for the 1966 Census of Agriculture. In addition, a number of specific problems in the current statistical program were raised by provincial representatives and the Economics Division of the Canada Department of Agriculture.

Field crop production in Canada in 1963 reached an all-time record index of 176.3 (1949 = 100), exceeding the previous high in 1952 when the index was 172.0. The regular reporting and analysis program of the Crops Section was undertaken during the year and in addition much progress was made in the preparation of a re-issue of the *Handbook of Field Crops*. Basic source material, derived from the results of mail questionnaire surveys of farm respondents and supplemented by material supplied by the Board of Grain Commissioners, the Canadian Wheat Board, Marketing Boards, private industry and other government departments, was integrated to provide a wide range of weekly, monthly, seasonal and annual statistics relative to production, marketing, processing and consumption of field and special crops. Analyses of the wheat and coarse grains situations were carried in the monthly *Wheat Review* and the *Coarse Grains Quarterly*. Extensive files of data pertaining to the production and disposition of cereal and oilseed crops are maintained and hence information and special tabulations were provided in addition to the data contained in the regularly scheduled releases.

Because of staff shortages during the year under review, the research aspects of the program were curtailed. A survey of seed corn dealers in Ontario was undertaken in an attempt to derive new and useful information pertaining to this crop which is growing in importance. A project was started, in conjunction with the regular program of obtaining new crop correspondents, to study response patterns by geographic area and by size of farm in Ontario and Quebec. Stocks of grain on farms has been a sensitive estimate in the Prairie Provinces for nearly a decade. Due to reduced crops, especially in 1961, and to improved sales, stocks shrank to more normal levels at the end of the 1961 and 1962 crop years; this provided an opportunity to check on the nature of the returns of a panel of crop correspondents.

The Division continued to co-operate with grower and processor associations and provincial authorities in studies of the application of objective estimating procedures for tender tree fruits. Continued co-operation was extended to the Province of Quebec in the development of this program of objective estimates of the apple crop.

More resources were channeled into the statistical field of Canadian food consumption with the aim of clarifying past trends and providing a broad framework from which projections of future requirements can be made. A comprehensive feed-concentrate balance pertaining to the Canadian feed-livestock economy was developed. Foreign reporting in the *Wheat Review* and *Coarse Grains Quarterly* was extended during the year.

The Livestock and Animal Products Section issued monthly reports on the output of dairy factory products, fluid milk sales, estimates of production and farm value of milk and eggs, and on stocks of the principal food commodities held in storage; quarterly reports on the number of pigs on farms and forecasts of sows to farrow; semi-annual estimates of other livestock and poultry on farms, annual estimates of meat and wood production and domestic disappearance. Annual reports on dairy, livestock, poultry and eggs and also on fur farm statistics cover production, trade and other related data for those products or segments of the agricultural industry. In these annual reports data compiled within the Bureau are supplemented by data from other sources. Considerable progress was made during the year in compiling historical series for a *Handbook on Livestock Statistics*.

Research pursued included correlation analyses on farrowing and hog marketing forecasts and detailed tabulation of population for selected areas under Milk Board control to establish a basis for revising estimates of fluid sales and per capita consumption of milk and cream. Dairy Commissioners and Milk Control Board officials in the various provinces were consulted in connection with this latter study. Estimates of poultry meat production for 1963 were prepared in greater detail than for previous years in order to separate fowl production from that of other chicken meat.

Revised mailing lists, based on the 1961 Census of Agriculture, were completed for all provinces in time for use in the 1963 June Survey of Crops and Livestock. The introduction of this new list has had a beneficial effect upon farmers' response in most provinces, particularly Ontario.

Revisions of farm income and expenditure estimates, based on the 1961 Census of Agriculture and the 1958 Farm Expenditures and Income Survey, progressed favourably despite some problems arising out of the change in the definition of a farm for the 1961 Census of Agriculture. The results from the 1958 survey have been used extensively in revising and making more complete the content of the expenditure items presently included in the Bureau estimates.

Arrangements were made with the two large vegetable marketing agencies in British Columbia to receive, on a regular basis, information regarding quantities and farm values of potatoes handled. Some information was collected in Saskatchewan and Alberta concerning marketing charges levied for livestock marketed through public stockyards.

A study was initiated to determine the possibility of making more direct use of municipal taxation data collected by provincial Departments of Municipal Affairs for the purpose of estimating farmers' expenses for property taxes. So far, investigations in Saskatchewan and Alberta look promising. The situations in the remaining provinces are somewhat more complex and will require further study.

Arrangements have been made to obtain regular information concerning farmers' premiums and indemnities received under the provisions of the Federal Crop Insurance Act. Up to the present, only Prince Edward Island, Manitoba and Saskatchewan have launched crop insurance schemes under the provisions

of this Act. During the year, discussions were held with a representative of the Canada Department of Insurance to consider the possibility of obtaining information concerning premiums paid and indemnities received by farmers in connection with insurance for the protection of the farm business against fire, hail, wind and other risks.

The Agriculture Division has been made solely responsible for the Bureau's collection and tabulation of information concerning farm debt. As a result, a thorough study of sources of credit available to farmers has been initiated. Already arrangements have been made through the Bureau's Public Finance Section to collect data concerning farm credit extended by rural municipalities.

Most of the work in the Interview Survey Section during the past year consisted of preparing drafts of reports from the 1958 Farm Expenditures and Income Survey and checking computer tabulations of data. Five series of analytical tabulations from Schedule A (Farm Business Expenditure and Income) were specified to meet the requirements of the Agriculture, Prices, and Research and Development Divisions within the Dominion Bureau of Statistics and the Economics Division of the Canada Department of Agriculture. These tabulations contain selected groups of summary items pertaining to farm operations and family income from all sources, classified for each province by type, size and other characteristics of the farm holdings and families.

Drafts for three reports were completed during the past year in the Interview Survey Section. In general, these reports contain more detailed classifications of data for selected items in 1958 *Farm Survey Report No. 1: Expenditures, Receipts and Farm Capital*, released during November 1962. The contents of these three reports consist of: (1) farm family income from sources other than the operation of farms; (2) motor vehicles and machinery on farms; numbers, values, and operating expenses; and (3) farm family assets and liabilities. Before publication of these reports, it has been considered essential to provide users of the data with an appraisal of the number of farms which supply the major part of the income received by the farm operator and his family. Data collected during the survey pertain to farms as defined in the 1956 Census of Agriculture. Many of these land holdings can be designated as farms only on the basis of the use of land area. However, it is well known that the income originating from these holdings constitutes a relatively small part of the total income received by the owner (or operator) and his family. In order to specify more precisely the number of farm operators and farm families actually dependent on agricultural operations for the major part of their income, some additional analysis of the survey data will be necessary.

Special tabulations and tables were constructed for research projects being conducted for the Royal Commission on Taxation, the Royal Commission on Health Services, the Organization for Economic Co-operation and Development and other agencies and organizations.

A formal project proposal outlining the details of a systematic investigation of the various mail questionnaire surveys carried out by the Agriculture Division was given approval by the Dominion Statistician in the Fall of 1963.

It is planned to evaluate the efficiency of present methods of estimation, to study alternative sampling techniques, and to recommend changes where there is an apparent need. It is also planned to study the feasibility of establishing probability sampling procedures from the point of view of: (a) a complete changeover to probability methods; (b) the subsampling of non-respondents using a field follow-up; (c) a combination of mail questionnaire and probability sampling methods. This will involve an assessment of the relative costs of the various procedures keeping in mind the timeliness with which the data must be collected, edited and tabulated. The initial investigation has centred upon the monthly poultry survey.

Other projects carried out during the year include:—conferring on the statistical aspects of objective yield measurement studies on tree fruits which are being conducted by the Province of Quebec and by outside agencies in Ontario; working closely with the Sampling Research and Consultation Staff both on problems associated with the analysis of the 1961 Quality Check of the Census of Agriculture and on plans for the 1966 Quality Check; a study of the variability of wheat yields in the three Prairie Provinces; and assistance to the Economics Branch and the Farm Credit Corporation of the Canada Department of Agriculture in the development of the Sample design of a survey of farm credit characteristics.

BUSINESS FINANCE DIVISION

A large part of the work of the Division is centred around the collection and analysis of the financial statistics of business firms. Surveys of corporation profits and related data are conducted quarterly and the results are published in a report entitled *Corporation Profits*. Profits data are presently provided for twenty-five broad industrial groups, an increase of five groups over the number published during the previous year.

Estimates of capital and repair expenditures on construction, machinery and equipment are obtained three times each year from business, institutions and governments. Estimates of the expenditures of individuals for housing are also included in these surveys. One survey of capital and repair expenditures is conducted in the Fall of the year and obtains estimates for the current year and intentions for the year ahead. Each Spring estimates of actual expenditures for the previous year are collected and at mid-year, a sample survey is undertaken to review the stated intentions of the previous Fall. Two reports are issued each year on the results of these surveys: *Private and Public Investment Outlook* is released in mid-March and gives the outlook for that year, preliminary estimates for the previous year and final estimates for the year prior to that; *Private and Public Investment Mid-Year Review* is released in July and gives a re-assessment of the intentions stated the previous Fall for the current year. Capital and repair expenditures for the years 1955 to 1959 are being assembled in conformity with the revised Standard Industrial Classification and should be completed by mid-1965. Data from 1960 on is already on the new industrial classification.

The results of the profits and investment surveys provide the basic data for these items in the National Accounts and are widely used by business and government as key indicators of current and future developments in the econ-

omy. Investment in plant, equipment, housing, institutions and other facilities is of particular significance in Canada since over a fifth of the nation's expenditures are usually made for these purposes. The size and content of the intended investment program and its regional distribution provide considerable information on the support that may be given to general economic activity as a result of the direct demand generated for labour, materials and equipment during the period of construction of these facilities and later when the newly created plants or other facilities go into production or service.

In addition to the construction data provided in the investment reports which show expenditures on construction by industries, agencies, or organizations paying for the work done, another report is prepared entitled *Construction in Canada* which provides information on value of work put in place by type of structure along with overall estimates of the labour and material content of this work. The value of construction by type of structure is reported in the capital expenditure or investment surveys. The labour and material content of these expenditures is estimated by applying ratios derived mainly from surveys of construction contractors to the total cost estimates taken from the investment surveys. Separate estimates are also shown for the total value of work performed by construction contractors and that performed by others engaged in construction work on their own account. The report containing this information is usually released in May of each year.

Monthly statistics on construction activity, as reflected by building permits data collected from approximately 1,400 municipalities in Canada, are published about six weeks after the close of each month in a report entitled *Building Permits*. This report contains information by provinces and economic regions on the number and value of housing units by type, for which permits have been issued. Value data is also provided as given on the permits for industrial, commercial, institutional and government building construction. Since building permits data are used extensively in estimating the number of housing starts, coverage of the survey has been extended to all municipalities in Canada issuing building permits.

As of January 1, 1963, the responsibility for the monthly publication *New Residential Construction* was transferred from the Special Surveys Division to the Business Finance Division. This report is based on nation-wide surveys by the Central Mortgage and Housing Corporation which collects the number of dwelling units started and completed each month and the number under construction at the end of the month. Volume estimates of the number of units put in place which are prepared quarterly and annually are derived from the starts and completions data and then cost and price factors are applied to produce value series in terms of current and constant dollars.

The total number of dwelling units constructed between 1951 and 1961, as estimated from the starts and completions surveys, is being compared with the net change in stocks between these dates as reflected in decennial census data. This reconciliation will result in adjustments to some of the annual and quarterly estimates published for the years 1951 to 1961.

Development work continued on the quarterly survey of corporation balance sheets which was initiated in 1961. This survey was undertaken to meet the need for information on how corporation activity is being financed, the liquid-

ity position of this sector and the probable demand for funds. A report released in May 1963 covering trust companies, mortgage loan companies, sales finance companies and consumer loan companies provided quarterly data from 1960 or 1961 to the first quarter of 1963. Quarterly data for the non-financial major industrial groups will be included in this publication as the information being collected is edited, improved and analysed. Reports will normally be released within three months following the close of a quarter.

An annual survey of the financial aspects of trustee pension plans is conducted in July each year and the results of the survey are usually published about December of the same year in a report entitled *Trusteed Pension Plans, Financial Statistics*. These surveys collect income, expenditure and assets data for plans with fiscal years ending between July 1 of one year and June 30 of the following year. These data are collected from employers having a trustee pension plan and from trust companies with respect to the investment of pooled and mutual funds. There are a variety of uses for the data collected: pension payments of individuals form a part of contractual savings as recorded in National Accounts; trust and investment companies are able to follow developments in pooled and mutual funds; and government bodies use the data as background material in social security studies.

Two biennial reports on Canadian scientific research, *Industrial Research and Development Expenditures in Canada* and *Federal Government Expenditures on Scientific Activities*, are published by the Division. Both reports show expenditures by source of funds, by performer of research, and by scientific field. They also provide information about classes of personnel engaged in research and development. During the year, the report *Industrial Research and Development Expenditures in Canada, 1961* was released, and new surveys of industrial and government research were started. Questionnaires for these new surveys were expanded in order to ask for additional information on the recommendation of users. It is expected that both of these reports will be published in 1964. The publication on industrial research will contain actual expenditures for 1963 and estimates for 1964. The report *Federal Government Expenditures on Scientific Activities* will present actual figures for the fiscal year 1962-63 and estimates for the years 1963-64 and 1964-65.

Monthly reports are issued on the total value of cheques cashed in fifty-one clearing centres in Canada which account for more than 80 per cent of all cheques cashed. Quarterly reports are issued on commercial failures in Canada on the basis of information supplied to the Bureau under the provisions of the Bankruptcy and Winding-Up Acts. The number of failures and the liabilities incurred are published by region and by industry.

A continuous survey of new firms is conducted to assist divisions of the Bureau in maintaining up-to-date coverage in various Bureau surveys. Efforts are made to cover all establishments in manufacturing and wholesale trade and, for other businesses, those with 15 or more employees. Co-operative arrangements exist with provincial governments whereby the results of these surveys are made available to them. A co-operative arrangement has been established with the Unemployment Insurance Commission as well, whereby their local offices collect a *Nature of Business Report* from all new registrants in conjunction with the completion of the Unemployment Insurance Commission

application for registration to purchase unemployment insurance stamps. In return for this collection service, the Bureau assigns industrial codes for all Unemployment Insurance Commission registrations. The publication *New Manufacturing Establishments in Canada* issued semi-annually, is based on results of this work.

The Division is also responsible for constructing a standard list of establishments according to definitions set out in the most recent issue of the *Standard Industrial Classification Manual*. As the title implies, the intention is to standardize coverage by industry groups so that the same establishments are included in each group in the various Bureau surveys collecting different types of subject matter, thus permitting the use of one statistical series with another, with the minimum adjustments for coverage. This standard list or index has been completed for all industries except some segments of trade and services and for Education and Health and Welfare surveys. During the year multi-unit firms were also assigned industrial codes at the company level and each of the over 100,000 entries in the standard lists was assigned an identification number. At year-end, preliminary work was underway leading to the application of the standard list numbering system to the monthly employment, payrolls and manhours survey and to the energy statistics survey. This classification and numbering system is also being adopted by the Corporations and Labour Unions Returns Act Administration. It is planned that other survey areas throughout the Bureau, in particular the annual Census of Manufactures, will adopt the standard list numbering system during the coming year.

CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION

The program of the Division includes the planning, compiling, editing and publication of both English and French language editions of two official compendia of information on the Canadian economy, the large 1,250-page reference volume, *Canada Year Book*, and the 320-page illustrated handbook, *Canada*, as well as the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library for statistical research and study.

The compiling, editing and printing of the *Canada Year Book 1963-64* extended throughout the first ten months of the fiscal year under review and the English language edition was released for distribution on March 6, 1964. At the close of the fiscal year production of its French language counterpart, *Annuaire du Canada 1963-64*, had reached only mid-point, owing to existing pressures on the translation services of the Government, and publication was forecast for August.

The official handbook *Canada 1963* was published in English and French editions by photo-offset process and released simultaneously in May 1963. The planning, preparation and editing of *Canada 1964* were carried on during the period September 1963 to March 1964 and final stages of production were sufficiently advanced to anticipate possible publication in both official languages by July 1964.

Throughout the spring and summer of 1963, translation of specially prepared English text, based upon the standard 1962 and 1963 editions of the official handbook, was completed in Spanish with the co-operation of the Translation Bureau and initial copies of a 256-page *Canada* were received from the printers as the fiscal year closed. This Spanish language edition of the Canada Handbook was produced by the Division largely for distribution by the Departments of External Affairs, Trade and Commerce, and Citizenship and Immigration through their offices in Latin America, Spain and the Philippines.

In its capacity as a focal centre for Canadian statistical material closely related to the Canada Year Book's overall coverage of the Canadian economy and its administration, the Division supplied regular series of Canadian statistics for the United Nations Statistical Monthly Bulletin, the United Nations Statistical Yearbook and for the International Labour Office. In addition, the long-established practice of providing up-to-date annual revisions of Canadian material was continued for a great variety of standard national and international reference works.

The Library at the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff and research workers. It also has an extensive collection of statistical publications received on an exchange basis from nearly all countries of the world. The Library's resources are used not only by Bureau staff but by other government departments, business firms and academic staff throughout Canada as well as the United States through inter-library loan facilities.

Continued progress was made during the fiscal year in reorganizing the varied library collection and in the task of rearranging it most efficiently in the limited space available. The general periodical collection was completely centralized in one area under an alphabetical title arrangement, thus terminating a project which has been underway for some time. Also completed was the physical rearrangement of the collection of DBS publications which have now been filed in an expanded classification as used in the DBS Catalogue of Current Publications.

Demands on the services of the Library have continued to be heavy; and it was not found possible to complete the manuscript of the Historical Catalogue for publication.

CENSUS DIVISION

The processing of the results of Canada's Tenth Decennial Census of 1961 continued, and during the 1963-64 fiscal year 102 reports, comprising some 6,000 pages of statistical information, were published.

During the year, the staff of the Division was employed primarily in examining tabulations of the Population, Housing, and Agriculture data, analysing and evaluating the results, and arranging the statistics in tabular form for publication. Cross-classification tabulations of the information were compared for consistency with the basic tabulations made earlier and then

prepared in a series of tables for publication. For the different series of reports, changes in concepts and definitions from previous censuses had to be reconciled, convertibility indices prepared, and the necessary adjustments made in the statistics for previous censuses in order that the trend data would be comparable. These adjustments were necessary to conform with the standard and international classifications requested for the various statistical series.

The first tabulations derived from information relating to income, fertility, and migration collected in the 1961 Census from a 20 per cent sample of private non-farm households. The results were examined, adjusted to meet the sample design, and the data prepared for publication. Three reports presenting family and individual income information were published during the year.

Included among the reports published was a series which presented for the census tracts in twenty-one of Canada's largest cities and census metropolitan areas, considerable basic information on the various characteristics of the population, including their economic status and occupations, and the homes in which the population resided.

The third and final brochure listing reports planned for publishing the 1961 Census information was prepared and printed during the year.

Following the release of the various bulletins, the staff commenced work on a number of detailed analyses of the statistical information collected in the Census. The significant results of these analyses and detailed statements covering the administrative procedures followed in the Census will be presented in a series of reports comprising the *General Review Volume of the Census*. Individual reports of these analyses will be published during the next year or two. Arrangements were completed with a number of university professors to write a series of analytical monographs on the social and economic life of Canada as indicated by the information obtained in the Census. Details of the tabulation requirements were submitted by the authors for review by the subject statisticians, the programming and the tabulation staffs. Assistance in assembling historical data for these studies was also given by members of the census staff.

The microfilming of the 1961 Census documents was completed and the films transferred to storage. A number of studies relating to times and costs of the various field and processing operations of the 1961 Census were undertaken with a view to establishing more economical and improved methods for the next Census.

In the Census Analysis Section, the regular series of reports dealing with estimates of total population and of population characteristics was prepared and published. These include estimates for June 1, 1963, as follows: (a) *Population of Canada and the Provinces*; (b) *Population of Canada and the Provinces by Sex and Age Groups*; (c) *Quarterly Estimates of the Population for Canada*; (d) *Population of Eleven Census Metropolitan Areas*. The 1962 *Annual Estimates of Families in Canada*, and the 1962 *Annual Report on Canadian Citizenship Statistics* were also published. Estimates of Population as of June 1, 1963, by Single Years of Age and Sex, for Canada and the Provinces,

were calculated and made available upon request. A special report was prepared and published in collaboration with other divisions of DBS in which *Selected Statistics on the Older Population of Canada* was presented. A paper showing the demographic trends as affecting the older population was also prepared. Considerable technical assistance was rendered to authors of the various monographs and considerable statistical data were compiled for other departments and commissions. One analytical bulletin describing the rural and urban population of the 1961 Census was prepared and published. Progress was made in preparing five other analytical reports on census information.

In the Administration Section, some 46,000 requests for verification of age, using early census and national registration records, were received and processed during the year. The Proofreading Unit, in addition to reading all manuscript before publication, reviewed all manuscript for consistency of the English and French text prior to printing.

Representatives of the Division served on various committees and provided consultation services to other government departments and agencies, including that of the Representation Commissioner. Members of the staff participated in the International Statistical Institute meetings and served on the secretarial staff. Officers of the Division also planned and participated in the program for training a number of international students and observers sponsored by United Nations and the Agency for International Development.

The review of the Division's functions and staff requirements, commenced in the previous year, was continued and discussions held with senior officials of the Bureau and the Civil Service Commission. While some progress has been made in this regard, the discussions were continuing at the year's end.

Toward the close of the fiscal year, a number of meetings were held to consider the need for a 1966 Census and to contemplate the inquiries that should be included in the censuses of population and agriculture. Draft questionnaires on these two subjects were prepared.

EDUCATION DIVISION

The Education Division functions as an agency for the collection and dissemination of information describing the state of Canadian education. Since the directive force for the conduct of formal education within such provincial boundary rests with the provincial government, it is inevitable that the pattern of the Division's activities has reflected the demands and needs of those who are actually responsible for the conduct of the schools, while at the same time considering the needs of the federal departments of government and international bodies. Since the position of education is dynamic, not only the series collected but the work of the Division is changing somewhat and expanding to meet an increasing number of requests for further analysis and greater interpretation of available information. Since education is being considered more and more as a basic factor in economic development and a contributor of production, an ever-increasing number of departments of government as well as a wide variety of other organizations are requesting information concerning manpower and are showing an interest in some phases of education planning.

As Canada has no education documentation centre, the Education Division, together with the Canadian Education Association, Canadian Teachers' Federation, Canadian Universities Foundation and some departments of government share this responsibility. Because the Division is the only unit of the federal government which compiles data on education for Canada as a whole, it provides considerable statistical data and information for international bodies, national organizations, departments of government, associations and individuals. In addition, it issues regular surveys of education throughout Canada at all levels and occasional publications as time permits.

Data for Division reports are compiled in many ways, sometimes using forms designed co-operatively with and distributed by provincial departments of education. Other forms are designed with approval of the universities, planned co-operatively with the Federal Department of Labour, or are forms originating from DBS. Data compiled from these forms, together with some provincial compilations, are brought together to present a composite picture of education in Canada. The principal data collected cover number and type of establishments; number, salaries and qualifications of staff members; number, levels and activities of those enrolled; and revenues and expenditures.

A primary function of the Division is that of co-ordinating provincial data to provide totals for Canada. Through limited analysis and significant comparisons of related data, trends are traced and estimates are produced. During the year, efforts were continued to bring the regular publications more up-to-date, to revise forms, to ensure the best coverage, to review the contents to ensure that they meet current needs, and to consider the adequacy of coverage for those interested in education planning. During the year, more reports were issued than during any year previously and the lag between time of reporting and publication was reduced in many cases. Where expedient, current data are made available through the Daily Bulletin and in preliminary releases.

Because the Division operates in a field where the provincial departments exercise jurisdiction and collect data on education for administrative purposes, the Division maintains informal though close liaison with the Departments of Education. By using the same forms, duplication of effort is avoided. Somewhat similar relationships have been established with the universities, business colleges and most other types of education institutions and with education associations in order to ensure the adequacy of data collected and series established.

The Chief of the Elementary-Secondary Section, who spent four months last year as statistical adviser for UNESCO to the Ministry of Education of Libya, spent from mid-October to mid-December on a follow-up mission to Libya this year. While there, he prepared a survey of education, related statistics and enrolment forecasts based on five different assumptions for the use of a team of experts in education planning.

Beginning in February, the Chief of the Elementary-Secondary Section became a part-time member of the secretariat of the Conference Arrangements Committee for the Third Commonwealth Education Conference to be held in Ottawa from August 21 to September 4, 1964.

The seventh Federal-Provincial Conference on Education Statistics was convened March 18-20, 1964, to review the forms used at present in compiling data and to consider implications of the introduction of tabulating units in some provinces. More delegates and observers attended this conference than any previous meeting of this kind, with representatives from the ten Departments of Education, four national education associations, four provincial trustees' associations and six provincial teachers' federations.

After consultations with university registrars and the Canadian Universities Foundation, two forms for the collection of higher education enrolment data received extensive revision. The revised forms make a more accurate count possible for determining eligible enrolment for Federal University Grants administered by the Canadian Universities Foundation and provides greater detail on part-time student enrolment.

Preliminary discussions are under way in an attempt to design current DBS forms to meet the needs of the Ontario and British Columbia governments for higher education data and to combine certain independent university salary surveys with those conducted by the Bureau. The DBS salary survey is used by the Pay Research Bureau of the Civil Service Commission and provides information requested by the Canadian Association of University Teachers.

In the Vocational Education Section, the *Survey of Vocational Education and Training* was published and, in addition, three reports were prepared for the Technical and Vocational Training Branch of the Department of Labour. During the year a special survey was designed co-operatively with the Department of Labour to determine the extent of organized in-service training in industry at the technician, supervisor level. In this respect, some preliminary data have been issued to date.

In addition to the regular publications the Adult Education Section issued an article *Special Library Statistics for Canadian Library* describing the use of the Gale Research Directory as a source of statistics in this field. The Chief of the Section attended meetings of the Statistics Co-ordinating Project of the American Library Association, New York, to review definitions and text for a handbook on library statistics.

The Finance Section issued the *Survey of Education Finance, 1959-60* and is preparing a new publication *Canadian Universities, Income and Expenditures* which should be available this summer. Work continues on the manual for secretary-treasurers of school boards which is now in draft form. A form for collecting expenditures on education by federal departments of government will be introduced for the year 1964.

The number of special requests increased during the year in both number and variety. Attendance at conferences and meetings also increased as new demands were made on education. Among these were meetings of the Learned Societies, conferences on education research, guidance, manpower and education planning by the Organization for Economic Co-operation and Development. In addition, many articles and reports were prepared for professional educational publications and for UNESCO.

EXTERNAL TRADE DIVISION

During 1963, the External Trade Division was reorganized into two sections and a central staff. The Operations Section was assigned responsibility for the compilation of commodity trade statistics and the preparation of export and import reports. The Classification and Surveys Section was assigned responsibility for the development and control of the classification systems within which these statistics are compiled, and the central staff was assigned responsibility for overall planning, for general research and analysis, and for information services.

The prompt publication of detailed statistics by commodity and country is the primary objective of the Division's work. Considerable progress was made during 1963-64 in reducing the delays affecting monthly import reports, and release dates for 1963 reports averaged more than a month earlier than those achieved for the 1962 series. The sustained rapid growth of export trade caused some delays in the production of export statistics in the latter part of 1963, but it remained possible to release detailed reports within six to seven weeks of the close of the reporting period.

In April 1963, the Division began to compile information on the means of transport used to carry exported goods from Canada. A plan for the annual tabulation of this information has been developed, and work is proceeding on the design of an experimental publication which will make these statistics available and also provide the sort of information formerly published in the series entitled *Exports of Canadian Produce to Overseas Countries via the United States and via Canadian Ports*. The new operation provides more information and appears to be less expensive and cumbersome than its predecessor.

The new Import Commodity Classification and its related references were completed in 1963, and put into effect with statistics for January 1964. Import and export statistics will now both be compiled within the framework of the Standard Commodity Classification, and will be readily comparable not only with each other but also with other commodity series which have been compiled on the basis of the Standard Commodity Classification. The new import classification is expected to yield the same benefits in flexibility, accuracy, and improved detail as were achieved when the companion export classification was introduced in 1961.

In order to minimize delays in compiling monthly import statistics during the period that the operating staffs were being retrained in the use of the new classification, it was necessary to recruit and train almost fifty additional clerks. The recruitment of suitable staff for this work has always been handicapped by the lack of adequate selection tests, and this build-up therefore created serious difficulties for the Operations Section. Even with these extra resources, the delays in monthly import reports for 1964 are expected to be of the same order as were encountered for exports in 1961, and normal release dates are unlikely to be restored before mid-1965.

The introduction of the new import classification required a thorough review and revision of the operating instructions governing the compilation of import statistics. This permitted two significant changes in import statistics which would otherwise have been difficult to control. The first was to substitute "general trade" concepts for the "special trade" concepts previously in use, and from January 1964, imports will be recorded on a "landed" basis rather than on a "cleared for consumption" basis. This change was prompted by a rapid growth in the use of customs warehouses, which was stimulated by the special duty surcharges imposed in 1962, but which continued even after the surcharges were eliminated. The increased use of warehousing created, for some commodities, an undesirable lag between the time goods arrived in Canada and the time that they entered import statistics. A parallel change was made in export statistics; from January 1964, statistics of re-exports include exports from customs warehouses.

The second change was to institute a closer scrutiny of the values entered in import statistics, in an effort to make these statistics reflect more accurately the actual amounts paid to foreign exporters for their goods. Earlier steps in this direction had been limited to cases involving specific commodities or special customs procedures, but in 1964 the values shown on all very large import entries (which account for some 20 per cent of the total value of imports) will receive special attention. This step is expected to reduce (but not eliminate) a tendency towards overvaluation in import statistics.

The heavy demands on scarce professional and managerial time made by the Import Commodity Classification program and the related procedures review, combined with the vacancy of key professional positions, effectively blocked any real work on another important problem. It has been obvious for some time that a significant proportion of the values used in export statistics are defective, and that existing administrative arrangements are not adequate to produce and maintain a reliable system of export valuation. Visits to a number of exporters, late in the fiscal year, confirmed that the problem is still widespread, but the number of interviews was not sufficient to provide a basis for a reliable estimate of the magnitude of these valuation errors. The solution of this problem will have to be the primary objective of research in the Division once the analytical difficulties associated with the introduction of new commodity classifications have been overcome.

HEALTH AND WELFARE DIVISION

This Division is responsible for the production of statistics on the state of the health of the Canadian people, on the enforcement of law and on the administration of justice in Canada. Three sections share the responsibility for producing health statistics. The Vital Statistics Section is concerned with recording and classifying births and deaths as well as with conducting statistical studies on mortality, fertility and life expectancy. This Section is also the recipient of records of marriages and dissolutions of marriages. The Institutions Section is concerned with collecting detailed information on the services, facilities, staffing and finances of general and special hospitals and of mental and tuberculosis institutions. The Public Health Section is con-

cerned with acquiring data on the condition and characteristics of patients in hospitals of every treatment type and also with obtaining figures on the incidence of a number of communicable diseases. The fourth Section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments, courts, correctional institutions and the National Parole Board.

The Division carried out its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports as well as by investigating special features of mortality. In accordance with the usual practice, new Life Tables were produced utilizing the 1961 Census population figures. The provinces were supplied with basic vital statistics tabulations as provided for under Dominion-Provincial agreements.

Throughout the year, the demands from public health authorities, from persons engaged in medical research, from producing and distributing firms, from market research agencies and from other user areas continued to be high, and carried with them requests for detailed analyses of current and historical vital records. Questions have been asked about particular diseases, about demographic changes, about the trend of fertility, and about groups of related diagnostic conditions. Each such request usually requires a particular investigation and some special calculation, since nearly all such requests arise after an examination has exhausted the published material in the field.

The Division has been preparing alphabetic registers of births, marriages and deaths on behalf of the provinces, and of the Family Allowances Administration since 1945. For some years negotiations have been under way with the agencies concerned in an attempt to cut down on some of these operations which are not directly statistical in nature. Some of these negotiations have been successful.

The Division each year provides the Vital Statistics Council for Canada with its secretariat service. Besides the work immediately associated with the meeting of the Council, the secretariat service usually involves the examination of a number of problem areas designated by the Council. Some of the problems relate to legal and administrative features of the vital statistics system. Others extend beyond the immediate operations of the system into the general sphere of social statistics. Redesigning the registration forms used by the provinces and reconsidering statistical headings to be placed on these forms are matters which have been under investigation for some time and which illustrate the particular and general nature of these problems. This investigation has the goal of forms standardized in terms of content, size and order of headings. The immediate benefits anticipated are those of economy, convenience of processing and ease of record exchange. Any economy in having the forms printed would be of direct benefit, since, under the terms of the Dominion-Provincial agreement, these forms are supplied free to the provinces. The ultimate benefits anticipated are those of improved and integrated vital statistics. Other benefits are anticipated through changes in conventional processing methods, through the adoption of new processing techniques and also through co-ordinating, wherever possible, the operations of the Division and those of provincial registration and vital statistics offices.

A complete changeover to computer processing from the previously used peg-bar and comptometer methods has made possible the production by the Division of a wider range of statistics regarding the operation and financing of general and special hospitals than could be made available in the past. The new processing procedure also made it feasible to calculate a series of hospital indicators—rates or ratios that measure workload, utilization, staffing, quality of care, costs and other related matters. Despite these advances, certain resource and communication difficulties still persist which lower the quality and delay the arrival of the incoming data. As a result, the rate of statistical output suffers. All eight volumes, for example, of the 1961 statistics on the institutional and financial features of general and special hospitals, have not yet been published, although the 1962 preliminary volume has already been released. Every effort is being made to find solutions to these problems. One delaying feature was the duplicate editing program carried on by the Division and by the Department of National Health and Welfare. This was eliminated during the year.

Several developments of note, besides the processing change, took place in connection with the institutional hospital statistics program. Revisions in the returns submitted annually by the general and special hospitals were incorporated into the 1963 and 1964 forms and major revisions for 1965 were tentatively mapped out. Steps are being taken to have the 1965 revisions satisfy the data requirements of other divisions of the Bureau. Besides immediate revisions to the forms, experimental work is being carried on with a view to revising the present schedule of unit values for clinical laboratory procedures.

In the mental and tuberculosis hospital fields the 1961 volumes on services, facilities and finances were released and the 1962 volumes are almost ready for publication. The material in these volumes is being rearranged in order to accelerate the release of reports somewhat more comprehensive than those that have appeared before.

A general and special hospital morbidity publication for the year 1960 based on tabulations of data from eight provinces was prepared. This project was originally undertaken on behalf of the Royal Commission on Health Services.

The 1961 report on cases admitted to or separated from mental institutions as well as the report on the conditions of patients in these institutions at the end of the year have been published. Efforts are under way to improve the quality of reporting of in-patients statistics for mental cases. Provincial adoptions of standard DBS reporting cards are important steps in this direction.

The regular reports on the cases treated in tuberculosis institutions in 1961 were published during the year, together with the monthly reports on the incidence of tuberculosis. The current incidence reports are derived from provincial registers of active, inactive and re-activated cases of tuberculosis. During the past year, British Columbia adopted the individual case reporting system in place of its previous practice of summarizing tuberculosis notification. Officers of the Division and officials of the Department of National

Health and Welfare discussed various methods of establishing a tuberculosis case register with health authorities in Quebec City. As a result, the Quebec case register began operations on January 1, 1964.

The 1962 annual report *Notifiable Diseases* was published during the year as well as the weekly reports on the current situation which were released regularly during 1963. Again, as in the previous year, special weekly and four weekly tabulations, subdivided by age, sex, city and health unit, were prepared and sent to the province of Alberta, which supplies the Bureau with individual reports on each case of a notifiable disease.

The 1962 report *Illness in the Civil Service* is about to be published. The series which classified the medically certified illnesses of federal civil servants by diagnostic type, by length and by the demographic characteristics of the affected persons will be the last report in this series.

During the year, the Division published information on police administration, on crime and traffic enforcement, on criminal and other offences, on correctional institutions and on juvenile delinquency. The Division also prepared statistical material for publication by the Commissioner of Penitentiaries and by the National Parole Board. A special motor vehicle thefts survey was also carried out. At the request of the Canadian Association of Chiefs of Police, work is proceeding on the production of two manuals: one on police records, and one on the classification of motor vehicle traffic accidents which will be a Canadian edition of the National Safety Council Manual, the rights to which have been released to DBS for this purpose.

With the introduction of electronic computer programming into the processing of police administration, crime and traffic enforcement and indictable offence statistics, several changes have taken place. To accommodate the acceleration in output due to the speed of electronic computer processing, internal procedures have been revised. It is still necessary, however, to refer preliminary figures back to police respondents for final verification but this can now be done much earlier than was possible before. In the verification and in the original editing of police statistical reports, over two thousand letters and queries were sent out.

A number of liaison activities in the police area, directed toward the improvement of incoming statistical forms, were carried out during the year. Eight seminars on the reporting of crimes under the uniform system were conducted by divisional officers. These seminars took place in various parts of Canada, with the local police acting as conveners. Training courses in the system were also held in the Division itself and were attended by members of Canadian police forces and police officials from other countries. The Canadian Army Provost Corps has introduced a modified form of the Uniform Crime Reporting system into its record-keeping procedures. Among the visitors from other countries that were introduced to this system, those from the Philippines and from Australia have indicated that they are interested in setting up similar programs in their countries. Papers on the present state of the Uniform Crime Reporting system were delivered at the annual meeting of the Canadian Association of Chiefs of Police and at provincial and regional meetings of the several police chiefs associations. Police forces in Ontario report monthly to

the Ontario Police Commission, at the same time as they report to the Bureau. At the request of the Commission, the Division developed procedures to make this duplication feasible.

Besides these direct liaison and training activities in the police field, the Division made changes in the requirements for traffic enforcements statistics in order to establish indexes based on offences charged and on accident statistics at the request of the Committee on Uniform Crime Reporting of the Canadian Association of Chiefs of Police. A special motor vehicle thefts survey, was carried out in May 1963 and the published results were discussed both at the annual conference of the Canadian Association of Chiefs of Police and of the International Association of Chiefs of Police.

In the field of Training School Statistics, a second meeting took place in June 1963 at the Bureau with provincial authorities in attendance. As a result, a simplified method of reporting on children admitted to training schools was developed.

An improved Penitentiary Statistics program is to begin on April 1, 1964. The setting-up of this program was preceded by a number of discussions with officials of the Canadian Penitentiary Service, by visits to the Bureau of Corrections in Pennsylvania and to the United States Bureau of Prisons in Washington. This program is intended to satisfy the needs of the Canadian Penitentiary Service for basic statistics and for information required in connection with special investigations. The first phase of this new program has been the development of a perpetual inventory of penitentiary inmates, the inventory being prepared by collating admissions and releases each day. Monthly listings will be sent to the federal institutions to verify the accuracy of the inventory.

Discussions during the year in the Adult Court Statistics area have been carried out with a view to simplifying the collection and improving the quality of reported information by changing from quarterly to monthly reporting. The new forms which are an improvement in content and design will soon be ready for presentation to the provinces for their consideration. At the same time, consideration has been given to the advisability of collecting details of the social characteristics of persons appearing in court; practices of a number of other countries have also been examined in this connection. The departments of the Attorneys-General of the provinces have been kept informed of all these activities. The desire of the departments for a simplification of the final reporting program has been kept firmly in mind.

The Division supplied considerable statistical information to the Committee on Juvenile Delinquency of the Minister of Justice. No changes of importance in the Juvenile Delinquency Statistical program will be proposed until the Committee's recommendations have been made public. However, one minor change was introduced, viz., a separate form to be filled out for informal cases in juvenile hearings.

INDUSTRY DIVISION

The Industry Division was established on June 1, 1963, when the former Industry and Merchandising Division was reorganized into two separate divisions: the Industry Division and the Merchandising and Services Division. The Industry Division was assigned responsibility for statistics in the fields of manufacturing and primary industries and for the development of productivity measures. Also, in order to achieve statistical and administrative co-ordination in the field of energy statistics, the new Division's responsibility was broadened in this area to cover statistics on all forms of energy. This involved the transfer from the Public Finance and Transportation Division, of that part of the Public Utilities Section responsible for statistics on oil and gas pipelines, generation and distribution of electricity and distribution of natural gas. The position of Co-ordinator of Energy Statistics was also transferred from the the Central Research and Development Staff.

The Division now consists of four main sections: Industry Statistics, Productivity Research and Analysis, Energy Statistics and Inventories, Shipments and Orders. A separate unit is responsible for the collection and summarizing data on stocks of critical survival materials for use of the Emergency Supply Planning Branch of the Department of Defence Production. The Industry Statistics Section consists of the former Census of Manufactures, Primary Industries and Operations Sections, the latter continuing in its principal function of collecting and processing the annual, quarterly and monthly data originating in the censuses of industry and in the current commodity surveys of the Division. The Energy Statistics Section was assigned, in addition to the statistical fields mentioned previously, responsibility for the monthly statistics on refined petroleum products and for the monthly and annual statistics on coal, crude petroleum and natural gas. The Inventories, Shipments and Orders Section was formerly attached to the old Census of Manufactures Section and now constitutes a separate section.

The Industry Statistics Section is responsible for industry and commodity statistics on an annual and current basis in the fields of manufacturing, mining, forestry and fisheries. Comprehensive industrial censuses are carried out each year, providing data on value of shipments, employment, payrolls, inventories, cost of fuel and electricity and cost of materials and supplies. Most of these "principal" statistics, along with computed "value added", are published by industry, province, small geographic area and by size of establishment and type of ownership. Annual data on thousands of individual material and product items are also collected and published as part of the annual census operations. While the annual censuses provide a wealth of integrated statistics, current information on the production of important commodities and materials is of primary importance and a considerable number of commodity surveys on a monthly, quarterly or seasonal basis are carried out. Results of all these census and commodity surveys are published in a regular series of nearly 300 reports and special statements.

During the past year, the change to the new establishment definition in the Census of Manufactures was virtually completed. While the statistics published in the 1961 census reports were compiled according to the Standard Industrial Classification and the new "accounting entity" concept for the

period 1957-1961, they were confined, as in the past, to "manufacturing activity". The data which will be published during the coming year in the 1962 reports will be on the basis of "total activity" of manufacturing establishments although data on "manufacturing activity" will still continue to be shown separately. In order to provide a one-year overlap, the 1961 statistics were recompiled on the new basis and will be published with the 1962 data. It is only at the "total activity" level that complete consistency between items of "principal" statistics can be obtained and the new compilations will provide improved accuracy and co-ordination of industry statistics. It has been recognized for some time that the operational data collected and compiled as "manufacturing activity" could not be entirely realistic and accurately defined; manufacturing establishments engaged in other activities, such as wholesale trade or construction, which are not treated as separate units in their accounting records cannot properly allocate certain items of statistical data entirely to a single activity.

The extensive changes in classification, concept and compilation procedures, which were implemented in the 1960, 1961 and 1962 censuses of manufactures, have strained the resources of the Section with a consequent loss in timeliness of the annual census statistics. A number of general industry reports had to be suspended for 1961 and 1962 to help regain some of the lost time, but where this would have meant withholding important statistical series, these were included in other regular publications. Improvement in timeliness, however, is expected for the 1963 Census of Manufactures.

During the past year, considerable progress was made in applying computer processing to the tabulation and editing of Census of Manufactures "principal" statistics and will be further extended during the coming year. Full use of electronic computer processing for the annual censuses of industry is an important factor in the Division's longer range plans for the improvement of timeliness and will permit a significant expansion in the number and detail of analytical series.

As a result of divisional reorganization, responsibility for subject matter is now divided into five units. These are the Minerals, Metals and Chemicals Unit, the Forestry Statistics Unit, the Foods and Beverages Unit, the Textiles and Miscellaneous Industries Unit, and the Fisheries Statistics Unit. In addition, to cope with the increasing number of complex reporting problems brought about by the recent changes in classification and concept, the Company Edit Unit was formed. This Unit is staffed with senior editing personnel who analyse the reports of all multi-unit firms to ensure accuracy and consistency.

In the Minerals, Metals and Chemicals Unit some progress was made during the period in implementing the new establishment concept in the mining industries. New questionnaires were developed for use in the 1963 Census of Metal Mines and new companion forms were also designed for integrated mining concerns which are also engaged in smelting and/or refining activities. It is expected that estimation procedures will be required to work back the data on the new basis to 1962 and 1961. The change to the new reporting basis for the other mineral industries will be carried out in the 1964 Census. Officers of the Unit organized a number of meetings with industry and government officials to

review existing statistics and discuss desirable changes. The more important of these were a Dominion-Provincial Conference on Mineral Statistics and meetings with representatives of the iron and steel, plumbing and heating, and chemicals industries. In addition, initial arrangements were made with the Department of Mines and Technical Surveys to form an interdepartmental committee on mineral statistics. At the request of the Central Research and Development Staff, for purposes of the Input-Output project, the Unit also co-operated in carrying out special surveys for 1962 of operating and maintenance supplies in the mineral industries and of containers and packaging materials mostly in manufacturing industries. It is planned to publish results of the latter during the coming year.

In the Textiles and Miscellaneous Industries Unit, the quarterly statistics on clothing were reviewed in co-operation with the appropriate trade associations and as a result the questionnaire was amended and the associations undertook to assist the Section in obtaining a higher rate of survey response. At the request of the Statistics Committee of the Society of the Plastics Industry, a special survey was undertaken to obtain 1962 production and shipments of certain types of plastic film. It is also planned to undertake an additional quarterly survey on hand luggage in 1964.

In the Foods and Beverages Unit, major changes in the method of Publication of a number of current reports were implemented. The report on *Quarterly Processed Foods* was discontinued and replaced by three separate quarterly reports, viz., *Fruit and Vegetable Preparations*, *Biscuits and Confectionery*, and *Miscellaneous Foods*. Following requests from the Department of Agriculture and from the industry, a monthly cumulative release was instituted covering the pack of canned and frozen fruits and vegetables. This report supplements the seasonal releases for individual packs. During the period, the Unit also prepared directories of bakery products manufactures and dairy products manufactures showing lists of establishments and the type of products they manufacture.

Developments in the Fisheries Statistics Unit centred about the proposed Survey of the Primary Fishing Industry and in this connection draft questionnaires and an enumerators' instruction manual were prepared and tested. The survey, to be carried out in co-operation with the Department of Fisheries, is to be periodic rather than annual and will be complete for large firms and on a sample basis for small operators. Many suggestions and recommendations for changes resulted from the tests and these will be taken into account in the final version of the questionnaire. A number of meetings of the Interdepartmental Committee on Fisheries Statistics was held during the year with resulting changes in the tabulations required for the International Commission on North Atlantic Fisheries. In addition, decisions were made which will affect the fisheries tabulating units in Halifax and Vancouver. In brief, it was agreed that DBS will assume full responsibility for operating these units. This will probably result in a number of staff transfers from the Fisheries Department.

In the Forestry Statistics Unit, the first Dominion-Provincial Conference on Forest Product Statistics held at the end of the previous fiscal year, resulted in increased co-operation with the provinces and in further elimination

of DBS-provincial duplication of surveys in this field. In particular, co-operative arrangements were made with the provinces of Newfoundland, Nova Scotia, Ontario, Saskatchewan and Alberta with respect to surveys of several forest products.

Developmental work is now being done on an annual survey of production on farm woodlands to be carried out in conjunction with the Agriculture Division's June crop survey. Heretofore, there was only a decennial census of farm woodlands and estimates were made for intercensal years. Close liaison was maintained with the various forest industry associations and as a result of these contacts, changes were made in certain annual reports. In particular, the report on *Paper Box Manufacturers* was discontinued and replaced by two separate reports, viz., *Manufacturers of Folding Cartons and Set-up Boxes*, and *Manufacturers of Corrugated Boxes*.

Officers of the Section, in line with an intensive program of improved public relations, made numerous personal visits to firms and associations during the year and attended several industry conventions and exhibitions. Individual meetings were also held with senior officers of the new Industry Department to initiate discussion of the Statistical requirements of the Department. It is expected that the Industry Department will generate considerable demands on the services of the Division in the future.

In the Productivity Research and Analysis Section, work was concentrated during the period on the development of the global productivity series and at the end of the year, a completed draft report showing the results of the project and describing concepts and methods was ready for circulation to interested government agencies for study and comments prior to publication. The major part of the work consisted in developing appropriate employment and man-hour series to match, in coverage and concept, the volume of output series produced by the National Accounts and Balance of Payments Division. The indexes of output per person employed and per man-hour worked relate to the commercial non-farm sector of the economy and cover the period 1949-1962. Indexes are shown for both the total manufacturing and non-manufacturing universes. The Section also made progress in its productivity measurement for individual industries. This work is at present concentrated in the manufacturing area and at year-end, studies of four manufacturing industries were nearing completion and work had started on two others.

During the period, the Section co-operated with other government departments in the preparation of reports to international organizations and provided technical advice, textual material and statistical tables to other government departments and agencies, industrial firms and universities. A first meeting was held with the Productivity Committee of the Economic Council of Canada to describe the work of the Section and discuss the Committee's statistical requirements. Several members of the Section's staff have prepared or are preparing technical papers for presentation at meetings of economic and statistical associations. The chief of the Section visited several European countries to discuss their experience in productivity measurement and the uses made of productivity measures.

In the Energy Statistics Section considerable emphasis has been placed on electric power and petroleum statistics. Two major meetings, one with the electric power industry and the other with petroleum refiners, were held in September. The petroleum refiners agreed to several modifications in reporting which will create significant improvements in the statistics and a new survey of liquefied petroleum gas distributors will fill a large gap in supply-demand of petroleum products. In addition, a monthly series on supply-demand of crude oil was initiated and plans are also being made to develop statistics on gasoline sales by grade and metropolitan area, on typical natural gas bills for representative cities and on supply-demand of natural gas and liquefied petroleum gases. In electric power, a major reshaping of the statistical collection program was approved by the industry, consolidating the requests of several government departments and the Bureau, and including a new monthly series on electric power sales.

In November, an overall review of the statistics on petroleum and natural gas exploration and production was initiated. Meetings were held with the Canadian Petroleum Association in Calgary to discuss the complex aspects of financial accounting in this industry and its relationship to the Division's statistical program. It is planned to effect revisions of collection procedures for this industry in the 1964 Census.

In the Inventories, Shipments and Orders Section, emphasis is being placed on revising the monthly series on the basis of the new establishment concept. During the period the revision of the monthly inventories, shipments and orders series to the revised Standard Industrial Classification was completed. This revision was based on Census of Manufactures results for the years 1958, 1959 and 1960 on the new SIC and the revised series were extended back to January 1958. The compilation of the economic use of groupings of industries was suspended when the old classification was discontinued, but it is planned to resume publication this year after the groupings on the revised S.I.C. have been reviewed. At the same time, the question of extending the seasonally adjusted series will be considered.

The annual revision of the monthly series, based on the 1961 Census of Manufactures, was underway at year-end. Since the 1961 base is on the new establishment concept, changes resulting from this have to be worked backward to January 1958 as well as from 1961 onward. The monthly series is to be confined for the present to manufacturing activity; the feasibility of extending the compilation to total activity will be considered during the coming year.

Considerable work was involved in changing the reporting basis of individual firms to the new establishment concept and it was necessary to deal with numerous cases of discontinuity and delays in the monthly data. In addition, the adjustments to new industry groupings have shown up gaps in coverage which will have to be filled to sustain adequate coverage in the monthly series.

During the year, the question of extending coverage of the monthly survey to industries which have to be estimated on the basis of related data was reviewed. New schedules for the bakeries and distilleries industries were set

up and mailed early in 1964 and the results will be incorporated in the regular series. A similar approach is being considered in the case of the printing and publishing, and the sawmills industries.

In the Emergency Supply Planning Unit, new surveys were undertaken during the year. Data are compiled and coded by location and every effort is made to make as much use as possible of established DBS surveys. In addition, to the regular surveys on foods and clothing, special series were developed on stocks of coal, coke and sawn lumber as well as on manufacturers' production and stocks of drugs and pharmaceuticals and of surgical dressings. Directories of food and clothing firms were also developed. At year-end, work was proceeding on special surveys of certain medical supplies and on the preparation of directories of producers and handlers of coal and coke, and of manufacturers of lumber, drugs, pharmaceuticals and surgical dressings.

INFORMATION AND PUBLIC RELATIONS DIVISION

The role of the Information and Public Relations is to stimulate the development and improvement of all activities which affect the public presentation aspects of the Bureau's work. This involves the extensive DBS publications program as far as overall effectiveness is concerned; the development and promotion of greater use of the Bureau's economic and statistical information with the Canadian community; the improvement of relations with suppliers of information so as to affect the quality and rate of response to DBS surveys; co-ordination and encouragement of the efforts of headquarters and regional officers which relate to these activities; the initiation of contracts with the press and other information media and the employment of other promotion and publicity methods as required to attain these objectives.

During the year under review, the Division proceeded to make arrangements with the objective of performing these duties more adequately. It was engaged in reviewing the nature and extent of information activities in Canada and other countries which have a bearing on DBS problems in this field. This review was nearing completion at the end of the year, and the employment of some additions to the staff was in process. It is expected that these efforts will result in a considerably improved publicity and information operation during the new fiscal year.

Telephone and written inquiries continued at a high level during 1963-64. Written inquiries were handled by the Division at a rate of between 20 and 30 per working day. In many instances material for replies had to be assembled from a number of sources and in some cases special tabulations were necessary.

Portable displays were provided by the Division during the year for use at conferences, seminars, and meetings. Considerable assistance was provided to other Government Departments and Agencies in the development of displays and exhibits of various types. Pamphlets and other promotional material were produced and special articles for selected news media were prepared with accompanying photographs. Co-operation with the press and other information media was undertaken resulting in the publication of news features, TV programs and photo stories.

prepared with accompanying photographs. Co-operation with the press and other information media was undertaken resulting in the publication of news features, TV programs and photo stories.

During the year, 250 issues of the Daily Bulletin were published with an average circulation of 1,600 English and 250 French copies per issue. The Weekly Bulletin was published each week with an average circulation of 1,500 copies per week.

The Division continued on a limited scale the promotion of the sale and distribution of DBS publications and, generally speaking, good results were obtained.

By the end of the year, the manuscript for the new *Catalogue of Current Publications* was ready for printing. It will contain up-to-date information on DBS publications as of April 30, 1964, and will take account of all changes resulting from the adoption of the revised Standard Industrial Classification. The catalogue lists 126 new titles and shows 59 old titles as being discontinued for a net addition of 67 titles. The new catalogue also incorporates all publications issued up to the end of April 1964 as a result of the 1961 Census of Canada. The total number of titles in the catalogue is 1,041 comprising 536 periodicals, 213 reference papers, 261 publications of the 1961 Census of Canada, and 31 working manuals.

Approximately 25,000 of the existing catalogue of DBS publications have been distributed since it was printed in 1960.

During the 10-day conference of the International Statistical Institute at Carleton University in August 1963, the Division produced a special bilingual Daily Bulletin, arranged display materials, photographic and newspaper coverage and supplied other publicity and information services for the conference.

LABOUR DIVISION

The Labour Division consists of three sections: the Employment Section, the Labour Income and Research Section and the Unemployment Insurance and Pensions Section. This last Section was formed by combining the Unemployment Insurance Section with the Pension Plans Section which was transferred from the Business Finance Division early in 1964. The Employment Section collects industrial establishment records of employment, hours of work and wages and salaries; it publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The employment index numbers are widely used for industry and area analysis of employment changes; per capita data on earnings and hours of work have several uses, the most important of which is perhaps in collective bargaining between labour and management. The Labour Income and Research Section issues labour income estimates giving industry and area totals and undertakes research and analysis pertaining to the general field of labour statistics. The Unemployment Insurance and Pensions Section provides the Unemployment Insurance Commission with operational statistics and publishes statistics of public interest concerning persons covered by unemployment insurance and persons claiming benefit. The Section also publishes statistics of private pension plans from an annual survey of trustee plans.

In addition to continuing the regular program of unemployment insurance and pensions statistics, a number of special projects were undertaken. These included planning arrangements for the collection of statistics for persons covered by unemployment insurance and others in connection with the registration for social security numbers in April 1964. This involved a series of meetings with the Unemployment Insurance Commission and other departments concerned with the registration. Final arrangements for integration of collection and sampling procedures for statistical purposes with the Unemployment Insurance Commission's operational procedures was facilitated by attendance of senior personnel at the Unemployment Insurance Commission School of Instruction for Head Office, Regional and Local Office officials, held in Ottawa in November 1963.

Senior staff members served on interdepartmental committees organized to study various aspects of the proposed Canada Pension Plan. These committees included the Subcommittee on Statistics and the Subcommittee on the Implications of the Canada Pension Plan for Private Pension Plans. In connection with the activities of these Committees, a number of working documents and background papers were prepared within the Division.

As part of a continuing program to take advantage of computer applications, the Semi-Annual Survey of Hirings and Separations of 60,000 firms was programmed for the computer in the summer of 1963. This is expected to produce some clerical savings and improve timeliness in publication.

The Employment Section continued the regular program of preparing statistics of employment, hours and earnings. The Annual Survey of Earnings and Hours of Work in Manufacturing was re-instituted in the Fall of 1963. This survey, which produces separate data on the earnings and hours worked of salaried, clerical, and production workers, had not been taken since 1960. Re-introduction of the survey was made possible by simplification of internal processing procedures and substitution of tabulation by computer for conventional mechanical tabulation. Considerable progress was made with the revision project involving transfer of the Monthly Employment and Payrolls to the new Standard Industrial Classification code, implementation of the standard establishment concept, adoption of a new geographical code and conversion from a 1949 to a 1961 base. It is anticipated that this long-run project will be completed by early 1966.

Considerable work was done on a proposed monthly publication containing estimates of numbers of employees by industry and province. This publication will combine results of large and small firm monthly employment surveys and will include historical data back to May 1961. In addition, a technical note describing the methods used in compiling these estimates and some of the problems encountered was prepared. Preparation of revised estimates of labour income from 1951 to date was commenced. This decennial project involves adjustment of data to take account of the new Standard Industrial Classification and the new standard establishment concept.

Comparison of the new series of employment aggregates with decennial census data and labour force survey estimates was made. Some of the results of this investigation were incorporated in the technical note referred to above. Discussions were held with the Economics Research Branch of the Department of Labour regarding the adoption of the new Standard Industrial Classification code and standard establishment definition in connection with the Annual Wage Survey and a comment was prepared concerning the Labour Income Section of a report on Unit Labour Cost by the Organization for Economic Co-operation and Development.

MERCHANDISING AND SERVICES DIVISION

This Division was established on June 1, 1963, when the former Industry and Merchandising Division was reorganized into two separate divisions: the Industry Division and the Merchandising and Services Division. Through the Decennial Census of Merchandising, the latter provides a wide range of statistics on the distributive trades—retailing, wholesaling and the service trades. In the intercensal years, sample-type surveys are conducted in important trades and the resulting estimates published in monthly, quarterly or annual reports. In order to carry out these functions, the Division is organized into four sections: Census Surveys, Sampling, Current Surveys and Current Statistics.

During the year, collection of delinquent questionnaires for the 1961 Decennial Census of Merchandising and Service Trades was finalized with the exception of a limited number in wholesale trade. Editing and preparing material for machine processing was advanced and the publication of reports was under way. Special tabulations for the census monograph *Trends in Canadian Merchandising* were completed and the intercensal program was prepared.

Data from the 1961 Decennial Census was released in three advance reports giving statistics on retail locations using the individual store or place of business as the statistical unit and showing retail trade by selected trades with 1951-1961 comparisons. In addition, the first of four standard Census Bulletins on location statistics was released. Special runs and tables were also prepared for various market research firms. Material for reports on retail establishments is being prepared and when published will contain comprehensive statistics using the accounting entity as the statistical unit. These will include data on part-time and full-time employment as at four selected weeks in the year, gross trading margin, commodity and other detail of sales.

In the Census year the annual surveys for service trades are merged with the Census to avoid duplication. Statistics on individual service locations have been published for 1961 for advertising agencies, motion picture producers, motion picture theatres and film distributors; the report on hotels will be released shortly and will be followed by one on launderers, dry cleaners and dyers. Provincial data for all service trades, by location, were also released. The more comprehensive data on service establishments, using the accounting entity as the unit, is presently being processed.

Before release of the 1961 Census publications in the statistical area of wholesale trade, both for location statistics and establishment statistics, much work has still to be done because of the many parts of great complexity, particularly in connection with co-operatives, petroleum bulk tank stations and grain elevators.

In addition to the above mentioned data from the 1961 Census, a tabulation of the Channels of Distribution of Manufacturers was recently completed. Efforts were made to contact all considerable sellers of merchandise through supplementary 1961 Census surveys, designed to measure important elements of direct selling to households which by-pass retail outlets. A survey of sales of newspapers, magazines and other publications through subscription, house-delivery of papers, and book clubs was also completed. In order to provide comparable area data the 1951 Census material for locations was re-run to take account of changes in geographical boundaries and shifts of trades under the new Standard Industrial Classification. A more ambitious program has been undertaken for the Census monograph to achieve reasonable comparability between 1961 and all previous Census years for the main types of business. These efforts will provide links between the two Censuses of 1961 and 1951 as required for the impending historical revision of the National Accounts.

In the intercensal program, the design and introduction of a new monthly sample of retail sales, inventories and credit receivables on books, by location, based on the 1961 Census, is approaching completion and the actual "responding units" will be selected by means of the computer.

An annual survey of wholesale trade, by establishment, has been initiated, largely because of the difficulties encountered in dealing with this subject as an occasional Census effort. This survey is designed with limited data-seeking questions but capable of being expanded on demand to produce any part, or all, of the detail previously sought in a Census year. The first such annual survey will cover 12,000 respondents for the year 1963.

A second annual survey initiated in 1963 is that for voluntary chains, by location, covering 5,000 respondents. The biennial sample survey of operating expenses of selected retail trades has been converted to an annual sample survey of approximately one-third of the trades, with all trades to be covered in a three-year cycle. The food trades, covering 15,000 respondents are being surveyed for 1963 data using the establishment as the statistical unit.

Investigations have been carried out of possible sources of lists or data in other departments, both federal and provincial. An agreement was reached with the Alberta Provincial Bureau of Statistics to reorganize both the survey carried on by them monthly for wholesale trade and also their annual surveys for retail, wholesale and service trades; with this co-operation, total coverage annually for that province will be greatly improved. Discussions have commenced with Ontario concerning the use of the complete data available on retail sales monthly through sales tax records. There is still the problem of rounding out lists for a comprehensive annual program for the service trades, an area in which the predominance of some 30,000 small businesses with a high birth-death rate, makes ordinary survey approaches impossible.

During the fiscal year under review, the regular monthly, quarterly and annual series were continued and reports published regularly. Discount department store sales were published for the first time in the March 1963 report of *Department Store Sales and Stocks*. A special bulletin on *Shopping Centres*, giving 1961 and 1962 annual data, will be released shortly.

NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS DIVISION

This Division, in its general responsibilities, is concerned with a wide range of economic statistics which includes the principal comprehensive statements and indicators relating to the Canadian economy. The preparation of these statistics for the publications which are described below involved the co-ordinating, processing and analysing of information from a variety of sources as well as some direct collection. The scope of information covered in these publications extends over the whole ambit of the organized output of the Bureau and beyond, providing a set of macroeconomic data relating to the Canadian economy. The data are used by economists and others concerned with observing the course and performance of the Canadian economy and advising on policy.

The principal products of the Division are indicated by the following publications. In addition, an important aspect of the Division's work is the provision of day-to-day assistance to many users. Regular publications include quarterly and annual reports on National Accounts and Balance of Payments, annual reports covering a survey of production, foreign capital invested in Canada and Canadian capital invested abroad, as well as travel between Canada and other countries. Monthly publications include *The Canadian Statistical Review*, *Index of Industrial Production*, *Sales and Purchases of Securities Between Canada and Other Countries*, *Travel Between Canada and Other Countries* and *Travel Between Canada and the United States*. *The Canadian Statistical Review* with its *Supplements* is the most comprehensive of the monthly publications, being the medium for presenting a selection of Canadian statistics from the whole range of information encompassed in the various fields covered in the Bureau's activities and from other sources. This publication also contains an article each month reviewing developments in special fields of Canadian statistics and, as well, it is a leading channel for the public presentation of monthly seasonally adjusted series produced in the Current Business Indicators Section. A supplement to the Review published in 1963 is the edition for that year of the Historical Summary which contains available annual data for many series for the period 1926-1962.

Work on the Balance of Payments has been augmented by the growing public attention being given to this subject with the emergence of several critical periods in a little more than a year. The effects of these events, the exchange crisis of June 1962, and the announcement in July 1963 of a proposal to introduce an interest equalization tax in the United States, have been to greatly increase the demand from both within the government and without for more statistics on the Balance of Payments, along with assistance in their interpretation.

In addition, there has been the need to extend the analysis in quarterly reports on the Balance of Payments. Growing relations with users of these statistics have included divisional participation in Washington on the Technical Working Group on Canadian-United States Balance of Payments Statistics, and in meetings of balance of payments experts in Paris jointly with the International Monetary Fund and the Organisation for Economic Co-operation and Development, and the Development Assistance Committee relating to statistical reports on the Flow of Financial Resources to Less Developed Countries.

Among developments during the year was the publication of the reference paper *Indexes of Real Domestic Product by Industry of Origin, 1935-1961*, by the Industrial Output Section and the issuing of the new publication *Historical Monthly Statistics* by the Current Business Indicators Section. The first of these documents complements the constant dollar expenditures in the National Accounts by showing in the form of a constant dollar index detailed developments by industries for the whole spectrum of Canadian industries which produce goods and services. The second document gives a complete historical record of selected monthly series together with technical notes on their historical continuity. Material for these series was drawn together with the help of originating divisions and most of the series have been adjusted for seasonality.

Experts in National Accounts statistics participated in the preparation of a paper *The Canadian Quarterly National Accounts, a Critical Appraisal* prepared for presentation at the Conference of the International Association for Research in Income and Wealth, Corfu, Greece, in June 1963.

PRICES DIVISION

The function of the Division is to collect, compile and publish data on prices and on consumer expenditure. The Division consists of five sections: Retail Prices, Consumer Expenditures, Wholesale Prices, Farm and Special Purpose Prices, and International Prices. The principal emphasis in the prices program is on the construction and publication of price indexes but data on average prices are published for selected commodities. Surveys of urban consumer expenditure are conducted biennially to provide a basis for revising the item content and item weights in the Consumer Price Index. The resultant body of information on expenditures of Canadian families is published and is widely used by business organizations and welfare agencies.

Price statistics of urban rents for April 1962 were released in the September 1963 issue of *Prices and Price Indexes*. These average rents for 16 major Canadian cities were based on data obtained from rented households in the labour force survey and provide a supplement to the occasional paper, *Residential Rents in Major Canadian Cities*, released in April 1962 which contained the same type of data for September 1959.

Spatial price indexes pertaining to food have been published for some time and experimental work is in progress to construct comparable indexes for the remainder of the consumer's budget for 12 cities. Conceptual problems still lie in the way of finalizing this study.

In an endeavour to improve our price data, a special study of retail outlets was undertaken in Toronto and in Ottawa. Prices were collected from a large sample of outlets, and in some cases the universe, for a number of items. The resulting price data were then compared with their consumer price index counterparts. In this same connection, some of the data from the 1961 Census of Distribution were examined with a view to revising city and outlet samples.

In the Consumer Expenditure Surveys Section, no expenditure surveys were undertaken in the year under review, following the intensive survey program in 1962-63. The interest evinced in the 1959 survey from business, welfare and academic quarters, indicated that the next survey of the complete budget should be similarly expanded and unrestricted, and for this reason, survey operations in 1964 will be concentrated on a year-end survey of the complete budget which will be broader in scope than the 1962 survey.

A new development in the Consumer Expenditure Surveys Section was the acceptance of responsibility for publication and other release of farm family expenditure data from the 1958 Farm Expenditures and Income Survey. Although the survey was carried out under the direction of the Agriculture Division, information on farm family living expenditures was obtained primarily for use in the Farm Prices Section. The task of publication, therefore, was assigned to the Consumer Expenditure Surveys Section which is responsible for surveys of urban family expenditure. Considerable progress was made in assembling a first publication which will present detailed average expenditure by province and region for the families of farm operators.

The year's work in the section was, to a considerable extent, an investment in timeliness and efficiency in processing future surveys. In addition to the transfer of editing and tabulation routines to the electronic computer for the 1962 survey of the complete budget, the 1962 food expenditure survey also was programmed for computer when it reached the final stages involving weighting of monthly city data. Thus 1963-64 marked a considerable change in work patterns, as the testing of tabulation and editing programs replaced clerical processing of expenditure schedules and the calculation of averages and percentages.

Requests for special tabulations from the 1959 survey continued to take considerable time, particularly in cases where liaison between users and programmers or tabulation services was required. Although the 1959 survey was processed by peg-bar and, for selected items, by unit-record equipment, in some instances data have been subsequently transferred to tape in fulfilling requests for additional tabulations. It is expected that with all survey data from current and future surveys committed to tape, the number and complexity of requests for analytical tabulations will increase and a greater amount of time be devoted to formulating requests to programmers and checking new programs.

In the fiscal year 1963-64, developmental work in the Wholesale Prices Section was almost entirely devoted to revising the Industry Selling Price Indexes to a 1961 base, although some further progress was made in constructing input indexes of manufacturing industries.

During the period, indexes for a number of commodities, compiled under the General Wholesale Price Index system and for which indexes were also available within the Industry Selling Price Index framework, were withdrawn from the publication *Prices and Price Indexes* and replaced by their Industry Selling Price Index counterparts. This course of action is in keeping with the Section's policy of de-emphasizing the General Wholesale Price Index as a current indicator of price movement for manufactured products.

In addition to indexes of prices of farm products and prices paid by farmers, the Farm and Special Purpose Prices Section prepares and publishes indexes of prices of industrial materials, highway construction, building materials and of common and preferred stocks. Revision and developmental work was pursued in connection with most of the indexes. The section continued its analysis of the data from the Farm Expenditures and Income Survey preparatory to the revision of the Prices Paid by Farmers Indexes and steps have been taken to expand and update the price series to be used in the indexes.

The coverage of the Price Indexes of Highway Construction in Canada 1956 = 100 was expanded during the year with the acquisition of additional cost data. This expansion will be reflected in the 1965 indexes. Continued progress was made in the collection and analysis of construction cost data from public and private utilities and it is expected that preliminary price indexes will be calculated for the transmission, distribution and substations components of the Electrical Utility Construction Index by the end of 1964.

During the year under review, the International Prices Section carried out full studies of comparative living cost conditions at about fifty foreign cities to determine appropriate allowance levels for civil servants stationed abroad. Officers of the Section visited various defence establishments in Western Europe to initiate accommodation and living cost surveys of Canadian military personnel serving there. These surveys were subsequently carried through to completion. In addition, detailed reports of the relative retail food cost situation, and of the domestic fuel and utility cost conditions, of federal civil servants stationed at over two hundred isolated locations within Canada were analysed.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

This Division consists of five sections: Government Employment and Payrolls, Government Finance, Public Utilities, Research Projects and Transportation. Its function is to collect and publish data on the financial structure of the three levels of government in Canada with details on numbers employed and payrolls, the performance and financial condition of rail, road, water and air transport and the financial and operational information concerning the various communications media.

During the year the Government and Payroll Section undertook, in addition to its regular publications program, the survey on Civil Service sick leave which was carried out previously by the Health and Welfare Division. Beginning with a revised pilot survey of sick leave for the 1962-63 fiscal year and later, a full-scale survey for 1963-64, the results will be forwarded to the Treasury Board for its exclusive use.

Federal Government employment and payrolls data of urban municipalities in Canada were issued in the form of a Daily Bulletin release. A very limited application of computer data processing was introduced although delays in the development of a full computer program to the Federal Government employment forced some improvisation in allocation of staff resources. A special wage rate survey was conducted for the use of the Department of Labour and similar special surveys for other departments are expected in the next few months.

In compliance with a recommendation of the Royal Commission on Government Organization, a Federal Government Committee on Personnel Statistics was established in December 1963 and held a number of meetings during the remainder of the fiscal year. It is expected to compile within a year an inventory of all personnel or manpower statistics now being collected or planned by all departments or agencies of the federal government including crown corporations; to make recommendations concerning feasibility of these statistical systems; and to recommend what statistics should be centrally tabulated by DBS for the use of Treasury Board, the Civil Service Commission and departments.

In the Government Finance Section, the first issue of *Financial Statistics of Provincial Government Enterprises* covering the years 1958 to 1961 was released. Also for the first time, a functional-economic cross-classification of federal gross general expenditures was prepared and published in *Financial Statistics of the Government of Canada, 1961*.

Fruitful discussions were held with officials from the Quebec Bureau of Statistics concerning the annual survey of provincial government capital expenditure intentions. In addition, preliminary revenue and expenditure data for municipalities in that Province having a population of 10,000 and over is being obtained from a joint reporting form.

The staff of the Government Finance Section also took part in important discussions with the members of the Department of Finance concerning the Royal Commission recommendations on the form and content of the Estimates and Public Accounts of Canada. Statistical assistance and material was supplied to the Royal Commission on Taxation, the Atlantic Provinces Economic Council, the Canadian Tax Foundation, the Ontario Commission on Taxation, the Quebec Royal Commission on Taxation and others.

In the field of road transportation, a thorough review of the motor transport traffic survey was instituted resulting in economies in operation. Considerable thought was also given to the introduction of a survey of the travel behaviour

of Canadians. Representations supporting this survey were received from federal and provincial government departments as well as the transportation industries. In this respect, a sample survey was carried out during the summer and fall months of 1963. After a number of discussions with officials of the Canadian Good Roads Association, it was decided to discontinue the use of their Uniform Classification of Roads and Streets. A revised classification will be introduced next year.

An important step towards a system of Standard Commodity Classification for the national economy was accomplished with the completion and publication of the *Conversion of Railway Freight Traffic 1961 to Standard Commodity Classification*. The 1956 edition of *Uniform Classification of Rail Employees* was revised and a preliminary issue distributed to the reporting carriers and the regulatory agency. This was adopted by the railways, effective January 1, 1964. Discussions were held with officials of the Canadian National and Canadian Pacific Railways concerning adoption of the DBS Standard Commodity Classification and the establishment of a DBS Committee on Rail Transport Statistics.

In the field of air transport, the Canadian Travel Research Association made strong recommendations concerning the reintroduction of a trans-Atlantic air passenger survey. Because of shortage of staff and a lack of adequate guarantee on the part of the airlines, it was decided to defer consideration of this proposal for the present. Arrangements were concluded with the Air Transport Board to compile and publish more detailed statistics on helicopter operations, and bulk (charter and contract) passenger miles and ton miles, segregating foreign from domestic.

In the Water Transport Unit, the shipping series was reviewed and reorganized with improvements being introduced in the compilation process. After consultation with the Canadian Shipowners Association, the *Water Transportation* report was revised with particular emphasis on terminology. A special study was completed for the Royal Commission on Pilotage including a detailed examination of the volume of traffic at Canadian ports according to pilotage districts for a period of years. The results of this study played an important part in the findings of the Commission.

During the year, responsibility for oil and gas pipelines and electric power statistics was transferred from the Public Utilities Section to the Industry Division. The former, however, will continue to be responsible for the production of other statistics in the public utilities field.

Plans were completed for the introduction of the Standard Industrial Classification into the statistical program of the Division. Conceptual difficulties and problems of procedure connected with its introduction into the government finance program were discussed. The classification will be first introduced into the government employment and payrolls series.

A central divisional reference source was created in the form of a complete listing of technical papers, text books, classifications and manuals located within the Division. Listings will be kept up-to-date and made available to the professional and technical staff of the Division.

A National Advisory Committee on Broadcasting Statistics was established during the year with the Director of the Division as Chairman and representatives of the Canadian Association of Broadcasters, the Canadian Broadcasting Corporation, the Board of Broadcast Governors and the Department of Transport. The purpose of the Committee was to establish a uniform classification of financial accounts for the industry; to assist in co-ordination of collection procedures between various federal government agencies and to advise DBS on collection, compilation and publication of statistics.

Similarly, a National Advisory Committee on Telephone Statistics was formed to advise DBS on problems in connection with collection and production of statistics in the telephone, telegraph and cable fields. Already a number of improvements in the collection and publication process have resulted.

SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for all field activities of the Dominion Bureau of Statistics. Current information on many topics is obtained by part-time interviewers working under the supervision of the different Regional Offices, who interview each month a scientifically selected sample of approximately 32,000 households across the country.

Each month questions on labour force activity are asked and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five main regions of the country. At the same time, enumerators inquire about rents paid and the information elicited is used to compile the rent components of the Consumer Price Index.

In addition, a variety of other information is obtained from time to time using special questionnaires. An annual bulletin entitled *Household Facilities and Equipment* results from special questions asked in May of each year and provides information on the facilities and equipment present in Canadian homes. A Consumer Finance Survey was carried out during March 1964 in order to gather information by personal interview from approximately 7,000 Canadian families concerning details of income, assets, investments and debts.

As part of their continuing duties, the Regional Offices collect data on retail prices of commodities for use in compiling the Consumer Price Index. They also maintain, for the convenience of local business firms and others, a file of all current DBS publications. The collection of business reports, which other divisions of the Bureau have not been able to obtain by mail, is also carried out through these offices.

Early in 1963, a major project was launched involving the complete re-design of the sample used in the monthly Labour Force Survey. The new sample design was introduced in the Province of Alberta in March 1964 and

will be introduced progressively in the remaining provinces during 1964 and 1965. Detailed data from the 1961 Census have been used for stratification and other sample design purposes. Many new technical features have been introduced to improve efficiency and accuracy.

One important feature of the new design is that it will lend itself to redesign within relatively small areas of the country where significant changes have occurred, without disruption of the design in other areas where stability or normal growth has occurred. For instance, restratification and redesign can be carried out within a selected Economic Region of a province when there is evidence that the system of stratification in that Economic Region is deteriorating. Within any city, redesign can be carried out in any part of the city where significant growth has occurred without affecting the sample in those parts of the city where stability or normal growth has occurred.

DATA PROCESSING SERVICES

The large-scale processing of statistical data at the Dominion Bureau of Statistics is undertaken by the Tabulating Services Division in conjunction with the Central Programming Division. The two Divisions work together to improve the processing services of the Bureau using the equipment most suitable for the purpose. A senior committee, under the chairmanship of the Dominion Statistician, meets monthly and guides the allocation of computer and programming time. Long run schedules for computer utilization are being developed in order to ensure orderly utilization of these facilities and to ensure proper priorities.

Tabulating Services Division

The subject-matter divisions of the Bureau gather data which form the basis for statistical tables. The Tabulating Services Division provides a service, using a variety of tabulating methods, to process the data, reducing it to more manageable form for further analysis. Broadly speaking, there are three methods of processing data in use in the Division.

When aggregates only are required involving a minimum of cross-classification, they are produced directly as a clerical operation by means of peg-bar methods of compilation using comptometers and desk calculators. This group, comprising 25 operators, handles a considerable volume of data, particularly where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work. This group also undertakes special projects involving more complicated calculations.

Next in order of complexity from a tabulation point of view are the many Bureau projects involving more difficult manipulation of the data and a number of more complex cross-classification. For these, the Division uses a wide variety of unit record (punched card) equipment. More than 100 operators record

the data from the source documents onto punch cards, about one half of them punching the cards and the other half verifying them independently for accuracy. Another group of some 60 operators use other punch card equipment, such as sorters, tabulators, reproducers and collators, to group the punch cards by the various characteristics of the data and to produce the totals required.

One important feature of unit record tabulation which has been developed to a high degree of efficiency in the Division has been the editing of the data by mechanical means, seeking out inconsistencies which may arise through misinterpretation of instructions and definitions governing the collection of data and through errors in recording answers.

To handle the larger and most complex applications, an electronic computing facility was established in 1961 in the Dominion Bureau of Statistics. Although the greater part of the time of the computer is allocated to the work of the Bureau, some requirements of other government departments and agencies have been accommodated on instructions from the Interdepartmental Committee on Electronic Computers. The installation consists of an IBM 705 System and an IBM 1401 System. The latter is used for about half the time as an input and output device for the former and for the remainder of the time is used as a separate computer. Throughout the year, the operations were on a three-shift, seven-day week basis.

The processing of the 1961 Census continued to absorb most of the computer time during the year under review. Most of the tabulations of the data collected on a 100% basis were completed during the year and a start was made on processing the data collected on a sample basis.

In 1963, in excess of 32,000 hours were used on various types of tabulating equipment (exclusive of auxiliary equipment such as sorters, reproducers and collators), using a total of approximately 25,000,000 punch cards.

Throughout the year the regular re-examination of existing projects was continued from the point of view of making the most effective use of all the resources available, including the computer installation. A significant advance was made in processing techniques by the development, in co-operation with the Central Programming Division, of a specialized program to simulate, on the 1401 Computer System, the operation of an IBM 101 Electronic Statistical Machine. Work was proceeding at the end of the year to produce these programs to tabulate statistical material more efficiently and economically.

As in the past, a number of projects were undertaken during the year for other government departments and agencies on a cost-reimbursement basis under individual agreements.

Central Programming Division

The principal functions of the Central Programming Division are systems analysis in collaboration with subject-matter divisions, and programming for projects approved as computer applications by the DBS Electronic Computer

Committee. In some cases investigation indicates that punch card or other methods of processing can produce the desired product just as timely and more economically than could be done by computer processing. An attempt is also made to eliminate routine types of manual editing, coding and other clerical operations by computer processing, thus releasing clerical staff for other aspects of statistical data collection, processing, analysis and publication.

Programming resources have been a limiting factor in the changeover of non-census DBS work to the computer. To help overcome this deficiency, DBS has been developing generalized or multi-purpose programs over the past year. The use of control or parameter cards with these general programs will eliminate, in many instances, the need for specialized programs for each tabulation. Improved card-to-tape, merging, sorting and information retrieval programs are included in this series.

One of the more significant developments within the Central Programming Division during the past fiscal year was the creation of a Scientific Section headed by one of the Senior Programmers. The purpose of this section is to work closely with the Sampling and Survey Research Staff, the Research and Development Staff and economists and statisticians in subject-matter divisions, to produce and modify programs for analysis of tabulated data, seasonal adjustment of time series, perfecting sampling techniques and design of sampling areas. This section originally consisted of the section head and one programmer but has been increased to a total of four as the work advanced.

In order to examine the Industry Division's activities and report on the feasibility of extending computer processing, revision of coding techniques and improved collection methods, one programmer was seconded to that Division. It is expected that this study will require from one to two years to complete. One senior programmer-analyst was also loaned to the Pay Research Bureau of the Civil Service Commission for a two-month period to assist in a survey of programmers' and systems analysts' salaries.

A new systems and methods position was established in an effort to standardize procedures within the Central Programming Division and carry out liaison with subject-matter and operating staffs. In addition, a DBS staff-training program, initiated during the previous fiscal year, was continued with officers of this Division taking an active part.

The DBS Central Programming Division actively participated in a programmer-training course conducted by the Civil Service Commission. It also provided an instructor for an IBM 650 course and field training for three "trainees" for the first two-month period and one person for the second two-month period. Assistance was given to personnel from other government departments when requested as well as to visitors from other countries, notably Australia, New Zealand and India.

As in the previous year, the Census Division was the greatest individual user of programming resources requiring the writing of 238 programs of a total of 478 written for the 1963-64 fiscal year. Emphasis shifted from the volume runs of population, housing and agriculture data to processing requirements for the 20 per cent sample of income, fertility and migration as well as monograph and special request tabulations.

Programming requirements for continuing activities increased during the year. Production of annual import statistics by computer was added to the previous monthly and quarterly tabulations. The introduction of a new sample design for the monthly Labour Force Survey required new programming, especially for variance and covariance. Additional tabulations were requested such as a survey of Post-War Immigrants. A start was made on the redesign of the complete labour force system to improve the initial system, to permanently incorporate changes requested over the past two years and to decrease the running time of the computer.

In addition to writing computer programs for DBS projects, the Division prepared annual tabulations for the Pay Research Bureau of the Civil Service Commission and wrote programs or prepared material for the Department of Veterans Affairs; Royal Commission on Taxation; Department of Northern Affairs and National Resources; the Province of Quebec and the Government of Ghana.

In order to maintain personal contact and discussion with personnel from other computer installations, visits were made to Washington and to Harvard University which proved worth while. It is hoped to continue and expand this type of education in the future.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general administration, staff organization, financial control and publications distribution, forms control and office services such as the addressograph unit, drafting unit, stenographic pool, supplies, mail and messenger services.

Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel and Organization and Establishment Sections. In carrying out these functions it is necessary to maintain close liaison with the Civil Service Commission on recruitment, pay, promotions, transfer and related matters.

The staff employed on continuing operations at March 31, 1964, numbered 1,970, an increase of 173 from the number employed on March 31, 1963. During the year under review, 32 statisticians and economists were recruited and 21 separated. There were 25 research assistants engaged on summer projects. Throughout the year, 204 promotional competitions were conducted. The 1961 Census temporary staff at Head Office, which numbered 279 on March 31, 1963, was reduced to 218 by March 31, 1964. The establishment authorized for the fiscal year under review was 2,025 positions and 367.5 man-years of casual clerical assistance including 259 man-years for the 1961 Census processing.

Staff training and development functions were further clarified in the past year. The DBS Training Officer acts mainly as an adviser to line management on employee development and related activities, and on technical training at

the divisional level. He is also responsible for directing supervisory and management development programs and participates in management consultation activities, as well as employee relations, counselling and guidance activities.

The Health Unit, a branch of the Civil Service Health Division of the Department of National Health and Welfare, continued to provide an industrial nursing service for employees.

Suggestion Awards

During the fiscal year, 45 suggestions from DBS employees were considered by the Suggestion Award Committee, nine of which received awards totalling \$130 for suggestions estimated to save the Bureau \$1,608.

Financial Control

This section is responsible for the distribution of DBS publications and the financial operations of the Dominion Bureau of Statistics. The latter include the preparation of estimates, examining and controlling expenditures, interpretation of financial regulations, preparation of financial reports and submissions to Treasury Board.

During the past year, the Publications Distribution Unit serviced 12,000 subscription orders to DBS publications in addition to casual sales—a total distribution of 1,745,000 individual reports.

Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications, which resulted in savings of both time and material.

During the year under review, the Forms Control Section processed 2,980 forms consisting of 8,105 pages, of which 1,025 were reprints, 5,960 were revisions and 1,120 were new or redesigned. Specialty forms, numbering 194, were also prepared, revised or redesigned and 210 envelopes were printed.

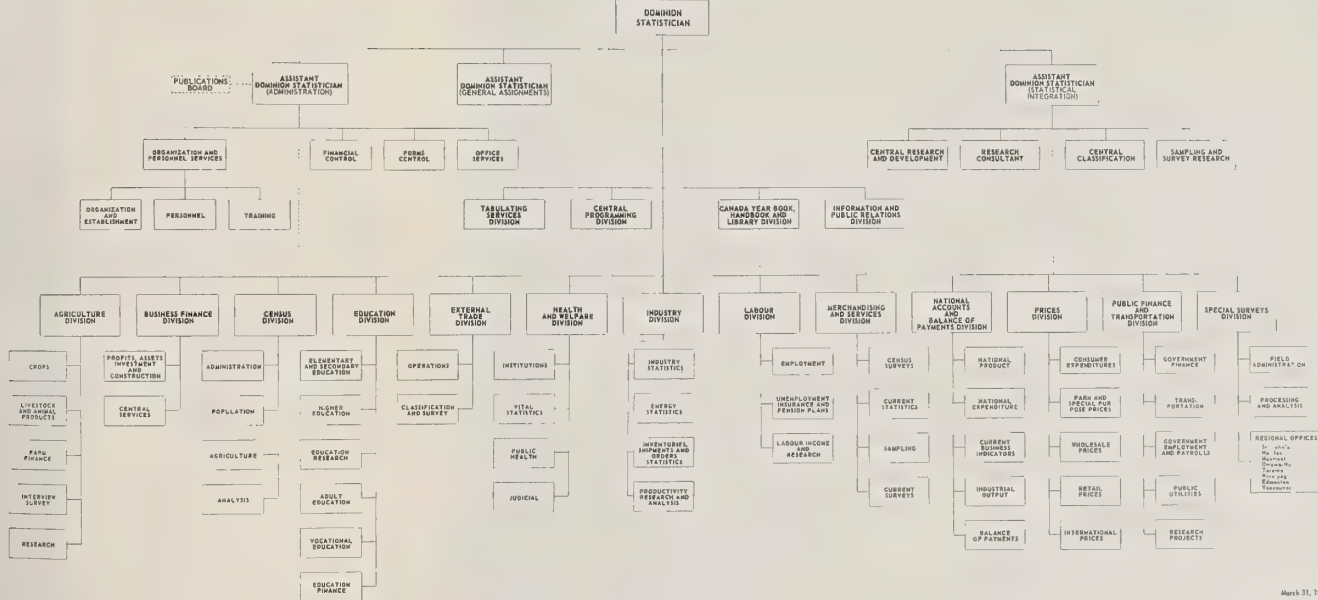
In addition, a comprehensive work study was made of processing corporation financial statements; revised procedures were developed to take advantage of mechanical processing methods. A start was also made on a work study of the processing of the monthly employment survey. The processing procedures of the annual electric meter survey were also studied and revised procedures developed to permit tabulation by punch card.

In addition, various layout studies of the DBS building were prepared in order to accommodate staff increases.

Office Services

In the Addressograph Unit of the Office Services Section, 11,714,732 forms were addressed for the various divisions of the Bureau. In addition, 314,406 plates were embossed, 132,585 corrected and 312,476 deleted.

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION



DOMINION BUREAU OF STATISTICS

CHART SHOWING ORGANIZATION

March 31, 1964

Effective November 1, 1963, the Vari-Type Unit was taken over by the Department of Public Printing and Stationery. During the period April 1 to October 31, 1963, the Unit planned, vari-typed and prepared for printing 8,944 pages of tabular and textual material. In addition, 3,930 hours were devoted to miscellaneous vari-typing of forms. Based on the current general average of 1.5 hours per page, this represents a theoretical production of 2,620 pages of publications, bringing the Unit's total production to 11,564 pages for the first seven months of the fiscal year.

The Drafting Unit completed 2,003 economic charts, maps, diagrams and various illustrations. The Unit also completed layout in colour of armorial bearings and floral emblems of the Provinces and Territories for the Canada Year Book.

The outgoing mail numbered 21,712 bags containing approximately 4,392,217 pieces of mail.

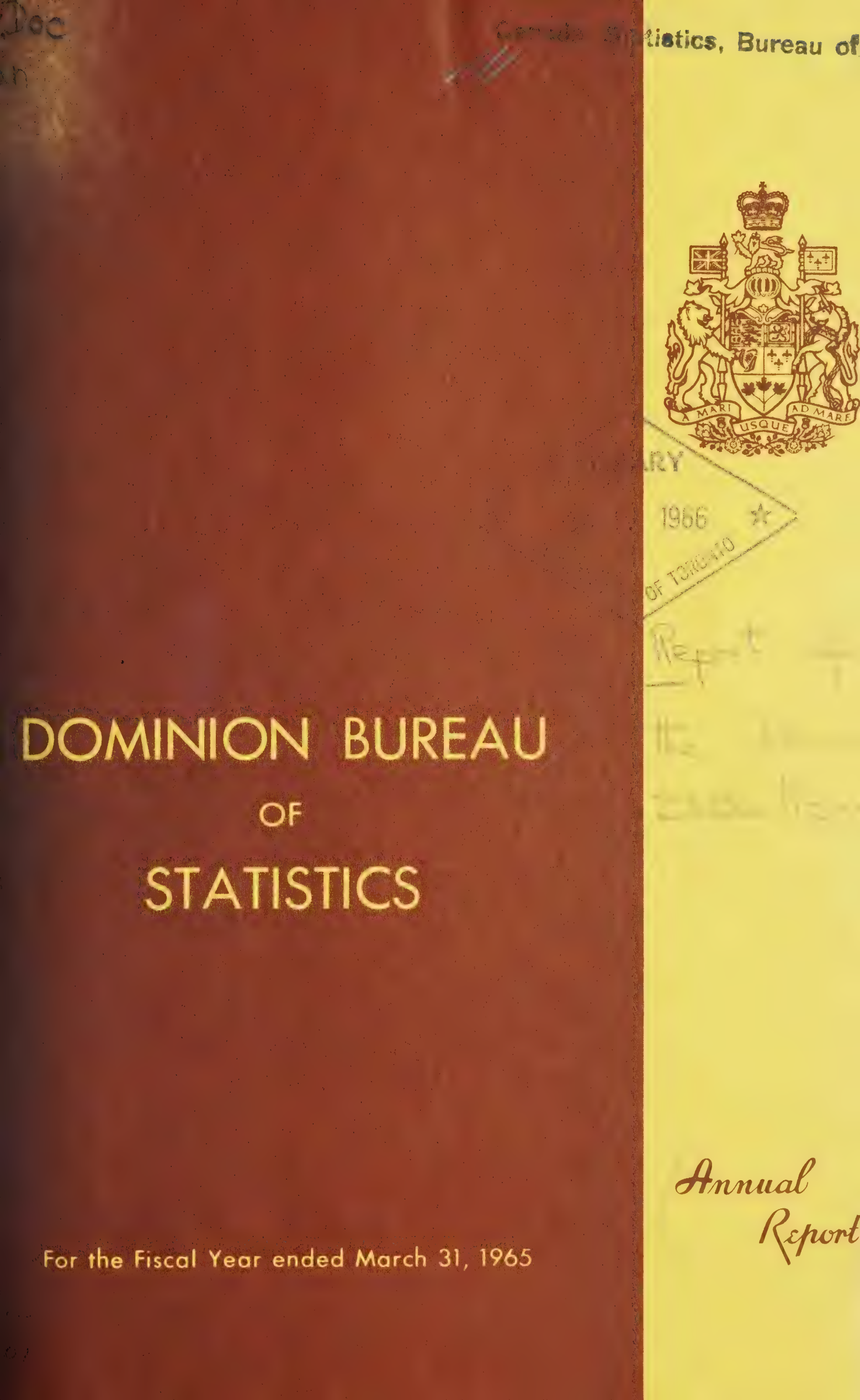
In addition to supplying stenographic and typing services to the various Divisions of the Bureau, the Stenographic Pool provided members of the staff on a loan basis to Divisions for 71 days. A total of 21,636 pages were typed of which 11,997 were photocopy and paper master, and 9,639 were drafts, statements and lists. Letters transcribed from dictation numbered 2,563. As well as the foregoing, 34,700 forms, envelopes and form letters were completed and prepared for mailing.

During the period under review, 7,497 requisitions for contact and Xerox duplicating were received and completed involving a total of 384,614 prints.

The Supplies Unit received from the Department of Public Printing and Stationery materials valued at \$375,801. The supplies inventory, as at March 31, 1964, was \$32,130; the turnover rate, therefore, was 11.3. Replacement value of DBS office machine and equipment inventory, as at the same date, was \$625,783 at original cost. Requisitions numbering 398 were completed for goods and services for which the Department of Public Works is responsible.



ANNUAL REPORT



Canada Statistics, Bureau of



ARY
1966
OF TORONTO

Report
The
2000

DOMINION BUREAU OF STATISTICS

*Annual
Report*

For the Fiscal Year ended March 31, 1965

CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1965

June 1965
1101-502

Price: 40 cents

*To His Excellency General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1965.

Respectfully submitted,

A handwritten signature in dark ink, reading "Mitchell Sharp". The signature is written in a cursive, flowing style with a large initial 'M' and a long, sweeping tail on the 'p'.

Minister of Trade and Commerce.

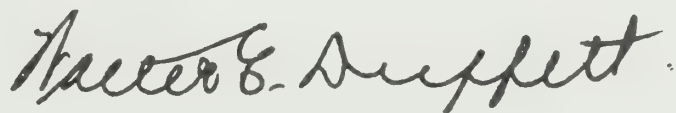
Ottawa, Canada
June 1965.

THE HONOURABLE MITCHELL SHARP,
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1965.

Respectfully submitted,

A handwritten signature in dark ink, reading "Hector G. Duffett". The signature is written in a cursive style with a large initial 'H' and a long, sweeping underline.

Dominion Statistician.

Ottawa, Canada
June 1965.

GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's activities in the Dominion Bureau of Statistics as well as certain operations closely associated with the office of the Dominion Statistician. Subsequent sections deal with the work of subject-matter and service divisions.

An important development took place in January 1965 when the Dominion Bureau of Statistics was designated as a department of Government. This step had been recommended in the report of the Royal Commission on Government Organization in 1962. In addition, the Commission's other recommendations, which drew attention to the growing importance of statistics in decision-making in government and business, are being studied.

Statistical demands of federal government departments and agencies, as well as provincial governments, accelerated considerably during the year. To a remarkable degree, new agencies at federal and provincial levels have developed in recent years, with urgent needs for statistics, especially statistics relating to regions and local areas. In most cases corresponding statistical facilities were not provided and the Dominion Bureau of Statistics has been under unusually heavy pressure to provide these types of data. The Fifth Federal-Provincial Conference on Economic Statistics was held in November 1964. Efforts are continuing to co-ordinate federal and provincial programs in order to improve the quality and timeliness of the statistics and avoid duplication, thus minimizing respondent burdens. In this connection the creation during the year of a Regional Analysis and Statistics Staff is significant.

A very important development was the introduction of the redesign of the sample of households in the Labour Force Survey. Introduced in Alberta in March 1964, it has now been in use in four other provinces and will be introduced in the remaining five provinces during 1965. Using 1961 Census data for stratification in the new sample, it can be readily modified in localities where significant growth or other changes occur. Evidence thus far indicates that the use of the new sample decreases sampling variability and makes measurement more precise. Some special studies in the area of manpower are planned as soon as staff become available.

The organization and planning for the 1966 Censuses of Population, Agriculture and Merchandising are well advanced. A field test was conducted in a part of the City of Ottawa in November 1964 to test enumeration procedures.

In the field of industry statistics, efforts are being made to regain lost timeliness in the release of data resulting from the changeover to computer processing and the implementation of the Revised Standard Industrial Classification and the new definition of the establishment. Introduction of the new Standard Commodity Classification in industry surveys, which will be completed in the Census of Manufactures by 1966, will greatly facilitate comparison between products shipped, materials consumed, exports and imports, as well as achieve greater consistency of commodity statistics between the numerous industry series.

A reference paper on productivity indexes for commercial non-farm sector of the economy has been completed. It contains annual indexes of output per man-hour and output per employed person for manufacturing and non-manufacturing sectors, as well as for the aggregate, from 1949 to 1962. In the field of

energy statistics, the developmental program initiated in 1960, is close to completion with supply-demand statistics by commodity and by transportation facility, together with financial data relating to these functions.

The administration of the Corporations and Labour Unions Returns Act, which reports to the Dominion Statistician and is located in the DBS building, provided valuable data to DBS during the year. An amendment to this Act, effective March 18, 1965, enables the officers of the Administration to make use of financial statements submitted to the Department of National Revenue for Income Tax purposes, and gives DBS officers access to this data. Plans are under way to assume responsibility for the preparation of that part of "Taxation Statistics", now published by the Department of National Revenue, which covers corporation statistics.

There was an increase in establishment of 142 positions in the last fiscal year but recruitment of experienced staff remains a difficult problem. The Bureau depends heavily for its success in the carrying out of the statistical program described in this report, on the skill and devotion of its staff which has given unstintingly of its support.

CENTRAL STAFFS

This group of functions comprises the Central Classification Staff, the Central Research and Development Staff, the Sampling and Survey Research Staff, and the Regional Statistics and Analysis Staff, the last having been established during the current year in response to widespread demand by federal and provincial departments and agencies for more statistics and analysis on a provincial and smaller geographical basis. A description of the activities of the various staffs follows:

Central Classification Staff

The development of the Central DBS List of Companies and Establishments has continued. The Central List numbering system, which had been adopted for the list of respondents in the Monthly Employment and Earnings Survey at the close of the 1964 fiscal year, has been extended during the current year to the Census of Manufactures, Energy Statistics, Rail, Air and Water Transportation, Wholesale Trade and the Corporations and Labour Unions Returns Act Administration. At the close of the year its adoption by the corporation financial statistics surveys of the Business Finance Division was being initiated.

The co-operative arrangement continued with the Unemployment Insurance Commission whereby their local offices collect a Nature of Business report from all new registrants. This has become the major source of information for keeping DBS survey lists up-to-date and is the basis of the semi-annual publication, *New Manufacturing Establishments in Canada*.

Work has continued, in co-operation with subject-matter divisions, to ensure uniform application of the Standard Industrial Classification. Notable in this connection was the review of government establishments and of certain complex companies. An interim edition of a Standard Geographical Classification, derived from the 1961 Census and providing code numbers for provinces, counties or census divisions, rural and urban municipalities, greater cities and census metropolitan areas, has been distributed. Two supplements, one providing maps and the other code numbers for countries outside Canada, will be

published shortly. An agreement has been completed with the province of Quebec whereby statistical data for that province will be tabulated and published according to the areal system comprising the Standard Geographical Classification. A version of the Standard Commodity Classification for use in coding materials and supplies used and shipments or sales of industrial establishments is being developed. Implementation of this classification is proceeding in other fields, notably freight transportation statistics. A convertibility list between the American Standard Transportation Commodity Code and the Canadian Standard Commodity Classification is being prepared to facilitate reporting of international shipments.

Work has commenced also on the development of a Standard Classification of Services. This classification will supplement the Standard Commodity Classification in providing a vehicle for collecting and assembling data on total expenditure for goods and services, including service inputs and outputs of the different industries.

Central Research and Development Staff

A major research study of alternative methods of adjusting economic time series for seasonal variation, carried out in collaboration with the National Accounts and Balance of Payments Division, was completed. One of the most important results of this study was the decision to change the method of seasonally adjusting unemployment and other series from the Labour Force Survey. A committee was established to deal with problems of discontinuities in economic time series arising from changes in definitions, concepts or method of measurement. This committee advises on methods of reconstructing time series to eliminate such discontinuities. It also advises on the application of econometric methods to problems of estimation and analysis throughout the Bureau.

The input-output staff carried out extensive revision and refinement of its plans in the light of recent developments in the field of input-output compilation and analysis. At the same time, work proceeded on the main commodity flow studies, on estimates of business services (a survey of which was completed) and investment income, and on federal government purchase of goods and services. On this last item, a co-operative project was completed in the summer of 1964 involving the Dominion Bureau of Statistics and the Department of Defence Production, the purpose of which was to code a majority of federal purchase documents for a one-year period, in order to provide commodity data required for the input-output table. A number of other studies connected with the input-output project were carried forward.

The program of financial statistics which is centred around the ultimate publication of an appropriate version of quarterly financial flows accounts has been carried forward. Much work has been done on problems of design, classification and concept. Background studies have been completed regarding procedures to be employed for carrying out quarterly surveys of life insurance companies and co-operatives, and questionnaires have been drafted in close collaboration with the Business Finance Division. Arrangements have been made whereby the Quebec Bureau of Statistics would supply to DBS current statistics covering the *caisses populaires*. An interdivisional committee was formed to study the meaning of "company profits" in relation to company accounting practices and income tax requirements. One important result of this work was that the questionnaires used in the quarterly surveys of corporation profits were revised.

The results of the 1962 Survey of Consumer Finances were released. Field work and processing was completed on the 1964 Survey of Consumer Finances which was expanded to collect data on consumer assets and liabilities as well as income, and which contained a special detailed questionnaire on stock ownership. Statistics were collected from a sample of 6,400 family units and the resulting data should become available in the spring of 1965. A report may be released during the following fiscal year.

A special paper was prepared and presented to the Senate Committee on Aging on the income position of the older population. The paper was published in the proceedings of the Committee. The writing of the income monograph was started and a number of chapters have been completed. It is hoped to complete the monograph in the coming year.

Regional Statistics and Analysis Staff

This staff has been created in response to persistent provincial demands for more statistics at the provincial and sub-provincial level; the requirements of various federal government departments and agencies such as the Area Development Administration of the Department of Industry and the Agricultural Rehabilitation and Development Act; and the general interest in small area statistics and research. The functions of the staff are: to keep provincial statistical officers informed of DBS developments and to inform DBS officers of statistical activities of the provinces; to assist subject-matter divisions of DBS in working out co-operative arrangements with provincial statistical agencies for collection and exchange of statistics; to initiate and co-ordinate the tabulations and analysis of statistics for special regional studies; to undertake studies designed to test the feasibility and determine the cost of new or improved information on a regional basis; to provide consulting services and on-the-spot assistance to the provinces and others when required.

During the current fiscal year much of the time of the staff was taken up with the preparation for the Fifth Federal-Provincial Conference on Economic Statistics which was held in November 1964; work arising out of the conference; and recruitment and related administrative problems.

Sampling and Survey Research Staff

The functions of the Sampling and Survey Research Staff include: to design sample surveys, analyse their reliability and establish efficient designs to maximize the reliability of data collected at a given cost; to establish quality control plans for large-scale operations, such as coding and key punching; to conduct response research and analyse the reliability of surveys and censuses in the context of response errors; to design experiments and conduct research into survey methodology and alternative methods of data collection; and to provide assistance on the mathematical aspects of various projects carried out by the Dominion Bureau of Statistics.

Work on the Labour Force Survey has continued to absorb a considerable part of the work of the staff. The redesign of the Labour Force Survey, an operation carried out jointly with the Special Surveys Division, has continued to progress according to schedule. The new sample design was successfully introduced in Alberta, Prince Edward Island, Nova Scotia, New Brunswick and Quebec during the fiscal year. A senior member of the staff and some supporting

personnel were engaged full-time on the stratification, preparation of maps and calculation of sampling ratios for the new sample design. Estimates of sampling variability for major Labour Force characteristics are produced monthly for all the provinces which have been introduced under the new design. Specifications were prepared for a computer program to produce, in addition to the estimates of total sampling variability, a breakdown of this sampling variability into components (one component corresponding to each stage of sampling), which will facilitate the analysis of the survey results and thus be instrumental in pointing to those areas of weakness in the sample which might gradually develop. This analysis will be part of a comprehensive system of controls designed to signal the deterioration of the sample if and where it occurs. Preliminary discussions are under way concerning a quality control plan which may be applied to the work of clerks coding industry and occupation. A research project has begun and specifications for a corresponding computer program has been prepared to study the effect of an alternative method of estimation which would utilize previous months' information in addition to the current information, in order to reduce the sampling variability of the estimates without increasing the sample size. A study was initiated to analyse the results of the re-enumeration survey conducted by supervisors and covering a subsample of the regularly enumerated households. A comparison of the interviews obtained by regular enumerators and supervisors will provide important materials for a study of response errors.

Work is under way on a program to analyse the quality of the 1966 Census of Population and Agriculture. The sample design has been established for a survey to re-enumerate a sample of farms after the 1966 Census of Agriculture. The re-enumeration will be conducted by specially trained enumerators using a more probing questionnaire. The comparison of the re-enumeration results with the census results for identical farms will indicate the errors in the Census of Agriculture. The sample for this survey has been selected and maps are now prepared for the selected areas.

Two projects have been designed to analyse the quality of the 1966 Population Census. In one of these, a sample of persons will be selected from various records including the 1961 Census, the vital statistics records for children born between 1961 and 1966, the immigration records for immigrants who entered Canada between 1961 and 1966, and other sources. The project will consist of locating the addresses of the selected persons at the time of the 1966 Census and then checking the Census records to determine whether they have been included in the 1966 Census or not. From this project an estimate of the proportion of persons missed in the 1966 Census of Population by province and by age groups will be prepared. The selection of the sample for this project has begun. In another project, which is now in the planning stages, persons and households enumerated in the Labour Force Survey and/or the Census will be matched. This project will provide information of analytical value concerning persons missed by the Census, persons missed by the Labour Force Survey who should have been enumerated, persons missed within enumerated households, persons missed within completely missed households and the labour force status of persons missed.

The sample design for the monthly Retail Sales Survey has been completed and the new sample is now being introduced.

In co-operation with the Labour Division, work has begun on the redesign of the monthly Employment Survey. The possibility of utilizing the computer to select the sample, handle the mailing and check in the completed questionnaires

are being explored. Specifications for a computer program to select the sample and prepare estimates from the sample using new methods of estimation have been prepared. This project could have wide implications since it involves an almost full automation of the handling of a survey, from updating the sample frame through the mailing and checking of questionnaires to preparing and printing the estimates in final form.

Specifications are now being written for a computer program to prepare estimates for the Motor Transport Traffic Survey. The opportunity is being taken at the same time to include a number of revisions in the survey procedures which should improve the resulting estimates considerably.

A quality control plan has been developed to be applied to the work of key punch operators working on external trade statistics. Under this plan ten per cent verification of punch cards will be replaced by sample verification. This plan has now been accepted by the Tabulating Services Division as well as by the External Trade Division for whom the punch cards are being prepared. The plan is due to be introduced shortly and a considerable reduction of the amount of time spent in verifying the punch cards will be effected.

Consulting services were extended to various government departments and agencies such as the Departments of Agriculture; External Affairs; Finance; Defence; Industry; National Health and Welfare; Mines and Technical Surveys; the Air Transport Board; the Canadian Union of University Students; the Central Mortgage and Housing Corporation; the Unemployment Insurance Commission; and the Canadian Association for Health, Physical Education and Recreation.

A paper on the new design of the Canadian Labour Force Survey was delivered at the annual meeting of the American Statistical Association in Chicago. A second paper on the 1961 Census of Agriculture Quality Analysis was presented at the annual meeting of the Canadian Agricultural Economics Society. In addition, an article on response errors in the 1961 Census of Population was published in the Journal of the American Statistical Association.

AGRICULTURE DIVISION

The Agriculture Division is responsible for the development and co-ordination of a comprehensive and integrated program of agricultural statistics. By conducting numerous farm sample surveys it collects current data from which to derive estimates of acreage and production of crops, number and production of the various kinds of livestock and poultry, farm income and expenses. It also conducts full coverage surveys at the manufacturing or wholesale level for production and stocks of a number of agricultural products, and co-operates directly with provincial departments and other agencies in the conduct of certain farm and industry surveys. In addition, it assembles data collected by other divisions of the Dominion Bureau of Statistics, the Canada Department of Agriculture and other agencies for statistical analysis and publication.

A federal Interdepartmental Committee, with various commodity subcommittees, and an annual Federal-Provincial Conference on Agricultural Statistics facilitate the co-ordination of the statistical program.

The Crops Section publishes a continuous and comprehensive flow of timely data and market information on field and horticultural crops in Canada. At the farm level much data is collected by means of mailed questionnaire inquiries of a sample of volunteer crop correspondents, seeking information on such topics as growing conditions, forecasts of acreage to be planted and what was actually planted, probable yields and actual yields, and farm stocks and quantities of grain fed on farms. Although published reports usually refer to provincial totals only, the data for many items are tabulated by smaller geographical areas and made available to provincial authorities.

In order to integrate material from farm surveys with other available detail on grains and oilseeds, two comprehensive reports, the *Wheat Review* and the *Coarse Grains Quarterly* are published. These publications collate and analyse national and international data and policy changes of importance to the production and marketing of the major commercial grain and oilseed crops. Detailed data on the movement of Canadian commercial grains and oilseeds are published in the *Grain Statistics Weekly*. Historical data are made available for reference purposes in a series of handbooks and in the annual *Grain Trade of Canada*.

During the year, a new survey was undertaken to determine the present structure of apple tree plantings in Nova Scotia and provide information on the direction in which this industry may be headed. This was a combination mail survey with a personal follow-up of a probability sample of non-respondents.

Due to the changing nature of marketing, especially for those commodities where producer and processor groups negotiate prices in advance of the harvest, there has been a growing demand for more precise early-season estimates of probable production. Such data would help alleviate one of the variables in the negotiation process. As a start in meeting these rather difficult and precise requirements, the Crops Section has been developing a system of objective counts and measurements. Apple counts have been underway in the Province of Quebec for a number of years and the program was extended to sour cherries and peaches in the Niagara District of Ontario this past season with encouraging results.

Work on questionnaire design and coverage for a proposed mushroom growers' survey was undertaken as well as development work on a proposed early-season survey to obtain a forecast of probable honey production. A survey to obtain data on the regional use of fertilizers in the Prairie Provinces was established. Preliminary discussions took place on the possibility of introducing objective measurements to obtain more reliable early-season production estimates of the Ontario winter wheat crop.

The Livestock and Animal Products Section commenced a survey of cattle on feed in Ontario and the Prairie Provinces. Initially, this survey is a part of the regular June and December farm surveys and is kept to the minimum of detail. With repetition of the survey with similar questionnaires in 1965 it should be possible to publish reasonably accurate data on magnitude of change between the two years. Benchmark data on number of cattle on feed is to be obtained in the 1966 Census of Agriculture which will also provide a mailing list for the eventual development of a more detailed, separate survey for which considerable demand has been evident.

A further subdivision of age groups in pigs, namely under 3 months old and 3 to 6 months old, was introduced into the 1964 surveys to facilitate market forecasting. The Section also co-operated with the Farm Economics and Statistics Branch of the Ontario Department of Agriculture in questionnaire development and planning for a survey designed to secure data on the current structures of pig production with special emphasis on the channels of weanling and feeder pig sales.

In its regular program, this Section issued monthly reports on the output of dairy factory products, fluid milk sales, milk production and its farm value, egg production, and on stocks of principal food commodities held in storage; quarterly reports on numbers of pigs on farms and forecasts of farrowing intentions; semi-annual estimates of other livestock and poultry on farms; and annual reports of meat and wool output and domestic disappearance. The Section also issued comprehensive annual reports on livestock statistics, poultry and egg statistics and on fur production. The annual report *Dairy Statistics* included historical revisions for the last intercensal period and corresponding preliminary revisions for 1962 and 1963.

During the year, the regular work of the Farm Finance Section included the initial processing of the semi-annual surveys of crop acreages, livestock numbers and disposition, farm woodlot production and farm wages; this involved the preparation and mailing of more than 800,000 schedules and the editing and tabulation of returns. Monthly surveys of farm prices of agricultural products and seasonal surveys of farm wage rates were also undertaken. Estimates were prepared and published for the indexes of farm prices and production, farm cash receipts and net income from farming operations, farm wage rates, farm capital and the value of total agricultural production.

The large-scale revision of farm income and expenditure estimates, based on the 1961 Census of Agriculture and the 1958 Farm Expenditure and Income Survey, was continued. In the process of making these revisions, efforts have been made to make these estimates more complete, particularly farm operating expenses. Items for which specific estimates have not been made in the past, include veterinary services, custom charges and insurance. While token allowances have been made to cover these items, no precise measures have been attempted until now. In connection with insurance, arrangements have been made whereby the Department of Insurance supplies provincial estimates of farm fire insurance premiums and indemnities paid to farmers.

Continuing efforts were made to develop new and more reliable sources of information for estimating the components of farm income and expenditure. During the past year, arrangements were made to obtain marketing data from the recently established Manitoba potato and hog marketing boards.

Work in the Interview Survey Section during the past year has centred almost entirely on the Farm Expenditure Income Survey. Computer processing has been completed for most of the data tabulations initially specified for this project.

The preparation of data required for proposed publications originating from the Farm Expenditure and Income Survey was given priority. Considerable progress was made in editing and revising the tabular material in the first draft of a statistical handbook entitled *Motor Vehicles and Machinery on Farms: Numbers, Values and Operating Expenses*. Summary data on values and operating expenses are provided for farms classified by acres of improved land,

product type of farm, and cash income from sales of farm products. Work was started on another statistical handbook based on the economic classification of farms used in the 1961 Census of Agriculture. Within this classification framework, the handbook will contain data pertaining to the physical organization of farms, such as acres of crops and numbers of livestock. The financial position of farms in the various economic classes is described in terms of the value of capital assets, operating expenses, cash income from sales of farm products, and income of the farm family from off-farm sources.

A major research report, tentatively titled *The Agricultural Sector: Its Structure and Composition*, has been planned with direct assistance from the Economics Branch, Department of Agriculture. The proposed project outline and analytical procedures have received approval in principle from an advisory committee composed of senior officers from the Dominion Bureau of Statistics, the Department of Agriculture, the Agricultural Rehabilitation and Development Administration, the Canadian Federation of Agriculture, and the Agricultural Economics Research Council of Canada.

Data from the Farm Expenditure and Income Survey related to the operation of motor vehicles and power machinery are being used in preparing the intercensal revisions of estimates of farm operating expenses. These data have enabled a separate estimate of the operating expenses for balers, and have provided the basis for assessing the importance of separate estimates for other power machinery such as forage harvesters, sprayers and dusters. It is anticipated that the survey data will contribute substantially to the improvement of estimates for other expense items which have been prepared for many years in the past. Direct estimating procedures, which were not possible previously, can be initiated for farm expenses such as insurance, veterinary services and interest on short-term debt. The Prices Division also has obtained data on farm business expenditures from the survey for use in improving and developing the weights of components required in the construction of more effective index numbers of prices paid by farmers and farm families.

BUSINESS FINANCE DIVISION

The Business Finance Division is concerned with the collection and analysis of data on profits, assets and liabilities, capital expenditures, research and development expenditures, cheques cashed, commercial failures, construction, housing and building permits. The Division participates also in the development of special studies on the flow of funds between sectors of the economy and on estimates of the stock of fixed capital held by various sectors.

Surveys of corporation profits and related data are conducted quarterly and the results are published in a report entitled *Corporation Profits*. Data on profits, taxes, sales and capital cost allowance are presently provided for twenty-five broad industrial groups. This profits survey has now been combined with a quarterly survey of corporation balance sheets which was initiated in 1961 as a separate survey to meet the need for information on how corporation activity is being financed, the liquidity position of this sector and the probable demand for funds. Although the quarterly profits and assets and liabilities surveys have been combined, separate reports are issued for each. A report first released in May 1963, gives quarterly balance sheet data on trust companies, mortgage loan companies, sales finance companies and consumer loan companies. Tables on

mutual funds and closed end funds were introduced during 1964. Development work is continuing on major industrial groups of the non-financial sector and these will be included in this publication as the information being collected is edited, improved and analysed.

Estimates of capital and repair expenditures on construction and machinery and equipment are obtained three times each year from business, institutions and governments. Two reports are issued each year on the results of these surveys: *Private and Public Investment Outlook* is released in mid-March and gives the outlook for that year, preliminary estimates for the previous year and final estimates for the year prior to that; and *Private and Public Investment Mid-Year Review* is released in July and gives a re-assessment of the intentions stated the previous fall for the current year. A start was made during 1964 on preparing estimates of capital and repair expenditures in manufacturing by economic region in each province and, where the provisions of the Statistics Act permit, results will be made available to users outside of DBS.

The results of the profits and investment surveys provide the basic data for corresponding items in the National Accounts and are widely used by business and government as key indicators of current and future developments in the economy.

In addition to the construction data provided in the investment reports which show expenditures on construction by industries, agencies, or organizations paying for the work done, another report is prepared entitled *Construction in Canada*. This report provides information on value of work put in place by type of structure along with overall estimates of the labour and material content of this work. The value of construction by type of structure is reported in the capital expenditures or investment surveys. The labour and material content of these construction expenditures is estimated by applying ratios of labour and materials to total value of work put in place. The ratios are developed mainly from extensive surveys of construction contractors. Separate estimates are also shown for the total value of work performed by construction contractors and that performed by others engaged in construction work on their own account. The report containing this information is usually released in May of each year. Starting with the 1964 survey of contractors, annual data is being collected on total monthly wages paid by contractors. These data in conjunction with information on wage rates collected by the Labour Division will permit construction of a monthly index of man-hours worked in the construction industry.

The Division also prepares the monthly report *New Residential Construction* which provides detailed statistics by municipality of units started, completed and under construction. This report is based on nation-wide surveys by the Central Mortgage and Housing Corporation which collects data by type of unit on the number of dwelling units started and completed each month and the number under construction at the end of the month. All municipalities of 5,000 population and over are enumerated completely each month. Municipalities of less than 5,000 population are also enumerated each month in instances where they form part of a major urban or metropolitan area. The remainder of the country is covered quarterly on a sample basis.

During 1964 a research program was initiated for the purpose of providing more accurate quarterly estimates of the value of housing put in place. This work is based on administrative records maintained in regional offices of Central Mortgage and Housing Corporation. Further work was done in 1964 on a

reconciliation of changes in the stock of housing between 1951 and 1961 with additions to the stock as estimated in the intervening years from the starts and completions surveys.

Monthly statistics on construction activity, as reflected by building permits data collected from more than 1,400 municipalities in Canada, are published about six weeks after the close of each month in a report entitled *Building Permits*. This report contains information by provinces, metropolitan areas, municipalities and some economic regions on the number and value of housing units by type, for which permits have been issued, along with value data as stated on the permits for industrial, commercial, institutional and government building construction. The February issue gives annual totals for the previous year with greater detail by type of structure, by province.

During 1964 the classification systems in the Building Permits Survey and the Contracts Awarded series (a survey by a private firm) have been brought into line so that direct comparisons of the two are now possible thus permitting maximum utilization of the data.

Two biennial reports on Canadian scientific research, *Industrial Research and Development Expenditures in Canada* and *Federal Government Expenditures on Scientific Activities*, are published by the Division. Both reports show expenditures by source of funds, by performer of research, by type of research and by scientific field. They also provide information about personnel employed in research and development, by level of training, by field and by type of research. During the year, the survey Federal Government Expenditures on Scientific Activities, 1962-63 to 1964-65 was completed and is now being published. This report provides actual expenditures for 1962-63 and estimates for 1963-64 and 1964-65. The survey Industrial Research and Development Expenditures in Canada is in its final stages and should be published in the near future. This publication will contain actual expenditures for 1963 and estimates for 1964.

In 1963, the Business Finance Division was invited by the Organization for Economic Co-operation and Development to participate in a meeting of experts on measurement of scientific research activity in Italy for the purpose of reviewing and revising the concepts to be used in surveys of scientific activities. In May of 1964 a member of the Division took part in a meeting in Paris organized by the O.E.C.D. for the purpose of approving the proposed standard practice for surveys of research and development and to participate in the organization of the International Research and Development Statistical Year. Questionnaires relating to the federal government scientific activities and industrial research and development were revised to conform to the standards agreed upon at the O.E.C.D. meetings. The results of the most recent surveys will be used in completing the O.E.C.D. questionnaire for the International Research and Development Statistical Year.

In addition, the industrial questionnaire has been expanded to try and obtain some qualitative information on the effect of federal government fiscal incentives on research and development.

Considerable time was devoted during 1964 to the preparation of preliminary estimates of fixed capital stocks for all the sectors in the economy. A progress report on this subject was published in the *Canadian Statistical Review* of 1964. Preliminary estimates of fixed capital flows and stocks for the years 1946 to 1960 were published in a special supplement to the *DBS Daily Bulletin* in

December 1964. Some of this material has since been revised. A monograph containing more detailed figures and a review of concepts, sources and methods, as well as a comparative appraisal of data was completed, in part, in 1964 and is expected to be released in the form of a reference document in the middle of 1965. More detailed estimates of fixed capital stock for the non-manufacturing industries are being prepared and it is possible that a research paper dealing with this subject will be made available to the public late in 1965.

Reports on commercial failures in Canada are issued quarterly and are based on material supplied to the Bureau under the Provisions of the Bankruptcy and Winding Up Acts. The number of failures and the amount of liabilities are published by region and by industry. Reports are issued monthly on the total value of cheques cashed in fifty-one clearing centres in Canada from material supplied by the Canadian Bankers' Association. This survey covers 88 per cent of all cheques cashed. An annual report on this subject is published in May each year.

CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION

The program of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official compendia of information on the Canadian economy, the *Canada Year Book* and the handbook *Canada*, the planning and production of a special volume designed to commemorate Canada's Centenary of Confederation, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with appropriate services for statistical research and study.

The compiling, editing and printing of the *Canada Year Book 1965* extended throughout the fiscal year and publication took place in mid-June 1965.

Canada 1964 was published in English and French editions by photo-offset process and the two editions were released simultaneously on August 20, 1964. The planning, preparation and editing of material for *Canada 1965* were carried on during the latter months of the fiscal year and production was sufficiently advanced to anticipate publication by September 1965.

The Division has underway the production of a specially designed publication of some 480 pages to commemorate Canada's Centenary of Confederation. Sponsored by the Bureau and recommended by the Centennial Commission as a Governmental centennial project, it will embody numerous features of the illustrated handbook *Canada* as it endeavours to highlight in textual, illustrative and tabular material a hundred years of Canada's political, economic and social growth from 1867 to 1967. Plans call for publication of English and French editions by April 1967.

The Library of the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff and research workers. It also has an extensive collection of statistical publications received on an exchange basis from many countries of the world. Demands on the Library continue to increase as the staff of the Bureau was augmented to implement the expanding programs in which they are engaged. A survey of operations conducted in the fall of 1964 indicated that both regular and interlibrary loans were running at a level double that of five years ago.

The Library's resources are used not only by Bureau staff in the various subject-matter divisions and in the research and dispensing of information in answer to inquiries from the general public, but by other government departments and agencies, especially new departments, which have not yet built up their library resources. Similar assistance is being given to the Eastern Ontario Institute of Technology, which requires the use of statistical information by the students in their studies in economics and business management.

Considerable progress was made during the year on the long-term project of reclassification and rearrangement of the library collection. Publications of international organizations and the Canadian government have been completely reorganized.

Preparation of the title index to the Historical Catalogue of DBS Publications has been completed and manuscript copies of the English edition made. Plans call for its publication during the 1965-66 fiscal year.

CENSUS DIVISION

In the year under review, the staff of the Division was engaged in the regular administrative functions including verifications of age from early census and national registration records for some 40,000 applicants.

In connection with the 1961 Census of Canada, the checking of machine tabulations and preparation of reports for the Population and Agriculture Censuses continued. During the year, twenty-nine statistical and analytical reports relating to these subjects as well as to Merchandising were prepared and published. In addition, six reports dealing with the subjects collected from a 20 per cent sample of non-farm households were prepared and published; these included income, migration and family size.

In answer to specific requests a large number of detailed tabulations of Census information were prepared and provided to outside agencies. In order to answer demands for detailed population data, arrangements were made to supply photo reproductions of the machine listings of seven sets of tabulations of population data on an enumeration area basis for the Electoral Districts of Canada. These included such characteristics as age, sex, marital status, religious denomination, ethnic origin, schooling, official language, mother tongue and residence on farms. In the 1951 Census, population totals and household counts only were provided on this small area basis.

Considerable progress was made during the year in the preparation of nine analytical monographs on Canadian economic and social life as revealed by the 1961 Census and other data. Efforts were successful in obtaining an author for the preparation of a monograph on Agriculture. The special tabulations required for the authors of the various monographs were reviewed and compared with the statistical information already obtained from the regular census tabulations. Clerical assistance was given to the authors in preparing statistical tables on their respective subjects.

During the year considerable analytical work was carried out in order to appraise the methods, definitions and concepts used in the 1961 Census. These studies will be of assistance in planning the 1966 Census of Canada. It was

decided by the Government, following requests from many quarters to carry out a small-scale Census of Population and Agriculture to be taken in 1966, the scope of which would of necessity, be along the lines followed in the 1956 Census. This would provide basic "bench-mark" data on population distributions, and characteristics by age, sex, and marital status, household and family size and composition, dwelling types and tenure, and agriculture data on farm areas, crops, livestock and machinery. In addition, plans were initiated for a Census of Merchandising to be taken in 1966, for the first time on a five-year basis.

Following the research studies carried out on the procedures for the 1966 Census, a draft population questionnaire was prepared and a census test of the questionnaire and proposed procedures was conducted in a section of the city of Ottawa. Detailed plans were prepared, as were the necessary administrative forms and instruction manuals. In late November, a field staff of two Census Commissioners and approximately forty enumerators was hired to carry out the enumeration. Following the enumeration, various analyses were made of the information obtained with a view to finalizing plans for the 1966 Census.

In March the Government gave approval for the 1966 Census, the content of the population and agriculture questionnaires and for arrangements with other government departments to assist in the Census. At the year's end, final arrangements for the administration and processing of the Censuses of Population, Agriculture and Merchandising were being prepared.

In the Analysis Section of the Division, the regular series of population estimates and annual reports were prepared for publication. These include population estimates by provinces on an annual and quarterly basis; annual estimates of population for provinces by age and sex; annual estimates by marital status, age and sex; annual estimates for the thirteen largest metropolitan areas and cities. Two annual reports *Canadian Citizenship Statistics* and *Estimates of Families in Canada* were prepared and published during the year. A paper dealing with some characteristics of the older population of Canada was prepared for the Senate Committee on Aging, and the Chief of the Section appeared before the Committee to answer inquiries on the statistics prepared.

Representatives of the Division served on various DBS committees and participated in the training program for the United States Census of Agriculture. A program for training a number of United Nations and International Co-operation Administrative Fellows and other international students was held during the year.

Plans for reorganization and strengthening the Division for future censuses were developed further. Two officers were appointed to direct the Demographic Analysis and Research Section and the Methods Research Section, and additional supporting staff were recruited during the past year.

EDUCATION DIVISION

A variety of considerations is influencing the Education Division which functions as an agency for the collecting, compiling, analysing and disseminating information describing the state of Canadian education. Since decisions concerning the conduct of formal education within each province are the responsibility of the provincial government, it is inevitable that the pattern of the Division's

activities reflects the demands and needs of those who are actually responsible for the education structure, while at the same time taking cognizance of the needs of federal government departments and of international bodies.

Education rates high among news items today. It is a subject in which both laymen and specialists are interested. In terms of persons involved, capital investment and operating costs, as a business it overshadows most of the industrial empires. Because it is growing so rapidly there is much concern over costs and contributions necessary at the municipal level, while at the same time greater demands are being made of the education institutions and graduates. To keep up with changes and to direct progress both educators and businessmen have become more involved in education planning and the use of electronic data processing and decision-making procedures. These important conceptual changes will be reflected in the work of the Education Division and its reports.

At the Winnipeg meeting of the Ministers of Education in September 1964, it was decided to establish an *ad hoc* committee to study the possibility of setting up a complete information system and data bank on education, using modern techniques and covering all of Canada. Officials of the Education Division were invited to participate as partners. At the same time the provinces, one by one, are adapting their data processing activities to the computer. This will in time affect timeliness, coverage and validity of data for the provinces and for all Canada.

To co-ordinate the Division's efforts with the Ministers' Committee on Data Processing, the whole range of data collected, the uses made of the derived statistics, and the relationship of these to planning, will be considered. It is also expected that efforts will be directed towards obtaining agreement on definitions throughout Canada, since this is basic to data collecting and processing.

To keep abreast of the more advanced countries, attention has been directed towards planning in education and the relationship of education to social and economic development. To this end a report, *Education Planning and the Expanding Economy*, was produced after surveying the extent of such planning in the provincial departments of education, universities and larger city school boards, as well as some countries abroad. Attention is now being directed towards expanding our coverage, and determining new series which will meet the needs of departmental officials and educational organizations in the light of information obtained from the survey, discussions and correspondence.

The Education Division along with the provincial Departments of Education, Canadian Education Association, the Canadian Teachers' Federation, the Canadian Universities Foundation and other bodies continue to share the responsibilities of a documentation and information centre. Because the Division is the only unit of the federal government which compiles information on all phases of education, it brings these together for international bodies, national organizations, departments of government, associations and individuals. This service is in addition to its annual and occasional publications, most of which include regular series compiled in a variety of ways.

During the year, the Division produced sixteen publications, of which twelve are now regular annual surveys in the elementary, secondary, higher, adult and vocational fields and finance. The occasional publications covered such areas as planning, university student income and expenditure and a selected bibliography.

Data for the reports are compiled in many ways. At the elementary-secondary level, forms used are designed co-operatively with and distributed and collected by the provincial departments of education. Other forms are designed with approval of the universities, planned co-operatively with the federal Department of Labour, or are forms originating from DBS after consultation with interested bodies or individuals.

The principal data collected cover number and type of establishments; number, salaries and qualifications of staff members; number, levels and activities of those enrolled; and revenues and expenditures. It is the aim of the Division to provide a composite picture of educational opportunities available in Canada and of the numbers enrolled at the various levels from kindergarten to post-graduate university levels. Recent expansion and interest in the adult education area, much of which is in preparatory courses and vocational-technical education, are reflected in this expansion. The whole field of in-service training now forms a large sector of education, as does informal education which is even more difficult to evaluate statistically.

A primary function of the Division is that of co-ordinating provincial data to provide totals for Canada. Differences in grade structure and curricula from province to province are being enlarged rather than lessened. The elementary-secondary divisions cover eleven, twelve or thirteen years and the high school division may begin after six, seven, eight or nine years. Other variations in organization are being introduced as the old grade structure is being replaced by a more functional organization in several provinces.

More use is being made of the statistical data on salaries in institutions of higher education year by year and the Higher Education Section is contributing through providing these data to teachers, administrators, teachers' associations, departments of government and others interested in such factual data. Information on salary schedules has also been supplied to interested bodies.

An article prepared for the Canadian Universities Foundation was undertaken, which related the estimated awarding of degrees by faculty to the Canadian University Federation forecasts to 1976-77. Some progress was also made in preparing historical material on university enrolment which eventually will be published by DBS.

The seventh and largest Federal-Provincial Conference on Education Statistics attracted fourteen delegates from the provincial departments, five from national educational associations, four from provincial trustees' associations and six from provincial teachers' federations. Discussions covered the obtaining of greater uniformity, exploring new series, the possibility of standardizing terms and newer methods of collecting and compiling data. Report forms are being adapted in line with recommendations.

The Chief of the Elementary-Secondary Section spent about half the year as a member of the Secretariat for the Third Commonwealth Education Conference held in Ottawa from August 21 to September 4, 1964.

The Vocational-Technical Section continued to expand its coverage of the field. Among publications prepared were the *Survey of Vocational Education and Training*, special releases for the institutes and trade schools, and *Organized In-Service Training in Four Major Industries* which will be released soon. In addition, a chart showing course offerings of thirty-eight institutes of technology and related institutions was given wide circulation. New forms are being tried out in order to provide additional data in the field.

The preparation of two reports using Census data together with work on a revised version of *Pupil Progress Through the Schools* has occupied the attention of the Research Section most of the year.

In the Adult Education Section, the annual surveys of adult education, public libraries, and academic libraries were prepared and a survey of museums and art galleries is now under way.

The Finance Section released the annual financial statistics of education and prepared a new publication, *Canadian Universities, Income and Expenditure, 1961-62, 1962-63*. A Federal-Provincial Conference was held in DBS to put the *Manual for School Board Secretary-Treasurers* in final form. It is expected that it will be printed and released by this fall.

During the year the number of special requests continued to increase in both number and variety. Attendance at conferences and meetings also increased as new demands were made on education. Among these were special meetings on education finance and economics, vocational-technical education and productive society, manpower, adult education, the trimester system of organizing universities and on foreign students. In addition, many articles and reports were prepared for professional educational publications.

EXTERNAL TRADE DIVISION

The External Trade Division is responsible for statistics of Canada's commodity trade with other countries. These statistics are published in the *Trade of Canada* series of reports, and are widely used in the business world and in government for specific market analysis, general economic analysis and as a guide to international economic relations.

The Division is comprised of two sections and a central staff. The Operations Section has responsibility for the compilation of commodity trade statistics and the preparation of export and import reports. The Classification and Surveys Section is responsible for the development and control of the classification system within which these statistics are compiled and of the alternative classifications within which they are presented. The central staff is responsible for overall planning, for general research and analysis, and for information services.

The period under review marks the first full year in which both export and import statistics were compiled within the general framework of the Standard Commodity Classification. The new Import Commodity Classification, introduced in January 1964, represents a substantial improvement over that which preceded it. Trade data are now much more comparable with those of other commodity series, and the new classification has facilitated an expansion in the degree of detail shown in trade statistics through the reduction or elimination of large "basket" or "not elsewhere specified" classes.

The year 1964-65 was characterized by particularly large increases in the volume of Canadian trade with foreign countries. By mid-1964 this factor led to the accumulation of a substantially larger backlog of unprocessed import documents than had been anticipated would result from the introduction of the new import commodity classification. To maintain the publication schedule it

became necessary to modify compilation procedures in several respects, the most important of which was the elimination of commodity detail on customs import entries individually valued between \$100 and \$199. These measures have led to a gradual improvement in the timeliness of the monthly import report.

The procedure, initiated in 1964, whereby large import entries are individually scrutinized to ensure that they reflect appropriate value figures has been extended from the beginning of 1965. Approximately 25 per cent of the total value of imports now receive this special attention.

An experimental preliminary import report for 1964 was issued at the end of March 1965, thereby advancing by about one month the availability of annual import totals with commodity by country detail. This initial report was prepared by merging the cumulative import totals for the first ten months of the year with first-run tabulations for November and December 1964. It is expected that such a preliminary report will prove accurate enough for useful service during the interval until the regular December issue becomes available. All value figures shown in this report were rounded to the nearest thousand dollars, and the comments of users were invited, as consideration is being given to limiting the presentation of values in regular *Trade of Canada* reports to thousands of dollars.

At the close of the fiscal year an initial publication on the mode of transport used to carry exported goods from Canada was being prepared for release. This report will relate to exports during the last nine months of 1963, and will be the forerunner of annual tabulations of exports by mode of transport for succeeding years.

In January 1965 the Division began to compile information on the province of lading of export shipments with a view to tabulating this information for annual and monthly release.

Release dates of the annual three volume *Trade of Canada* report continues to lag, with only *Volume II (Exports)* for 1961-62 having been released during the fiscal year under review. An accelerated program for restoring the timeliness of these volumes should result in a marked improvement during 1965-66.

HEALTH AND WELFARE DIVISION

This Division is responsible for the production of statistics on the state of health of the Canadian people, on the enforcement of law and on the administration of justice in Canada. Three sections share the responsibility for producing statistics on health. The Vital Statistics Section is concerned with recording births, deaths, marriages and divorces. In particular, it carries out studies on natality, mortality, fertility and life expectancy. The Institutions Section is concerned with the services, facilities, staffing and finances of general and special hospitals, and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in hospitals of every treatment type. It is also concerned with the incidence of a number of communicable diseases. The fourth section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments, courts, correctional institutions, the Penitentiary Service and the National Parole Board.

The Division carried out its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports, as well as by supplying basic tabulations to the provinces as provided for under Dominion-Provincial agreements. Throughout the year the demands from public health authorities, from persons engaged in medical research, from producing and distributing firms, from market research agencies, from other government departments, and from other users, continued to be unusually high. Questions were asked about mortality from particular diseases, about groups of related diagnostic conditions, about the course of demographic changes and about trends in nuptiality and fertility, continuing the pattern established in previous years by calling for detailed analyses both of current and of historical records. Before it was possible to answer many specific requests it was necessary to carry out individual investigations, as the information has either not been published, not been calculated, or not been compiled. To supply a number of such demands and to satisfy the needs of special interest groups, several series of analytical studies have been published or planned in the fields of cancer, accidents, foetal and infant mortality, as well as in the area of life expectancy and survivorship. These analytical reports will focus attention on particular trends and will highlight the factors that bear on the problems posed by the trends.

The Division prepared alphabetic registers of births, marriages and deaths on behalf of the provinces and since 1945 of the Family Allowances Administration. For some years now, negotiations have been under way with the agencies concerned in an attempt to cut down on operations like these which are not completely statistical in nature. Some success has been achieved and negotiations to this end are continuing. In addition to negotiations concerning alphabetic registers, arrangements have been concluded with several provinces to purchase copies of punched card records of statistical events. These arrangements, which have been made possible through standardization of coding and of recording procedures, will make it unnecessary to prepare original statistical cards in two places. Negotiations are proceeding with the other provinces in order that they too may be afforded the opportunity of sharing with the Bureau the cost of producing such basic records. At the same time as the change in the way in which the information arrives is being arranged, the processing operations in the Bureau itself are being progressively converted to a series of automated steps. Once completed conversion to computer operations has taken place, it will be easier to make plans in cooperation with the provincial authorities, to advance publication dates, and to answer new and continuing demands for additional vital statistics.

The Division each year provides the Vital Statistics Council for Canada with its secretariat service. Besides the work immediately associated with the Council meetings, the secretariat service usually involves the examination of a number of problem areas designated by the Council. Some of the areas relate to legal and administrative features of the vital statistics system and others extend beyond the immediate operations of the system into the general sphere of social statistics. Examples of both types of referral are the redesigning of the registration forms used by the provinces and the reconsidering of the statistical headings to be placed on these forms. These technical and conceptual examples illustrate the nature of the problems referred to the Division by the Council. The review being carried out of the content of the items on the vital event forms is the last step in a series of moves to standardize the forms completely in size, order of headings, and content. The immediate benefits anticipated from this complete standardization are those of economy in printing, convenience of processing and ease of record exchange. Printing economies are a direct benefit to the Bureau,

since, under the terms of the Dominion-Provincial agreement, forms are supplied free to the provinces. The benefits ultimately anticipated are those of improved and integrated vital statistics.

In characterizing the operations and finances of hospitals of all types, the Division produces a wide range of statistics. It was possible to accelerate the production of these statistics this year, and even more improvement in timeliness is anticipated in future years. The most important advance has been in the general and special hospital areas where questionnaires were returned sooner and processed on the computer more quickly than in previous years due to a reduction in tabulation requirements, which resulted from two years of experience in handling automated output, as well as a major recasting of Volume VII of the annual *Hospital Statistics* report, "*Hospital Indicators*".

The Division introduced several material changes into its hospital reports this year. One change was to provide estimates of unreported basic data which appear in the current tables in the regular hospital publications; they are also being calculated for inclusion in the historical tables. Estimates for unreported basic data were also published in the latest preliminary hospital statistics volume. It was of special value to have these estimates in the preliminary volume, which is designed to provide summary statistics at as early a date as possible. Another change in content concerned the "*Indicator*" report, which now contains standard deviations and quartiles, in addition to arithmetic means. Trend information is now becoming available, with three years of comparable statistics. More analysis will be required, particularly analysis of the interrelationships among various factors, before it is possible to make maximum use of this pool of information.

In 1964, the Division distributed to tuberculosis sanatoria comprehensive forms similar to those used by general and allied special hospitals. With these extended forms now in use, plans are under way eventually to process tuberculosis sanatoria data in much the same way as general hospital figures are treated now. Such similarity in treatment will permit valid comparisons between various types of institutions. Revisions were made this year in the general schedules for mental institutions. Revisions are also planned to take place in the coming year in connection with the financial returns filed by the mental institutions.

Divisional officers participated in a number of institutes and training sessions that were held in various provinces which resulted in improvement in the quality of hospital data reported to the Bureau. Field work at provincial hospital commission headquarters was also carried out, and this contributed in part to the improvement in timeliness that took place this year. As a further contribution to liaison between correspondents and the Bureau, statistical material was transported to annual meetings of hospital associations, and put on display there. These exhibitions proved most successful and more of them are being planned for the future.

The Division continued to publish information on the medical conditions and other characteristics of patients in hospitals of all types. In particular the Division published a first report on hospital morbidity in general and allied special hospitals. This report shows detailed diagnostic information for over two million cases. The report covers eight provinces with a population of between eleven and twelve million. Along with information on diagnosis and on days of care, the publication shows population rates that are subdivided by age and sex. Information of similar detail and scope has not been published before for an

identified population of this size, and its release therefore represents a significant Canadian addition to morbidity knowledge. For many diseases these hospital case figures constitute the only published information available.

In addition to publishing a regular report on patients in mental institutions, the Division produced a special brochure relating to mental retardation in Canada, which was prepared for the Federal-Provincial Conference on Mental Retardation which was held in Ottawa from October 19 to 22, 1964. Along with its other mental health activities, the Division gave substantial help to one province which was setting up a central mental health records system. From this central office the Bureau now obtains the information it requires for preparing annual reports and answering special requests.

During the year regular reports were published on morbidity in tuberculosis institutions. In addition, a series of monthly reports were issued on the incidence of tuberculosis of known active, inactive and reactivated cases, the data for which were received from the provincial registers.

Weekly bulletins on the occurrence of communicable diseases were released for the benefit of public health authorities; these figures were later incorporated into an annual publication. All provinces except Alberta supply information on communicable diseases by way of weekly case summaries. Alberta forwards individual case records for all diseases except venereal infections. From these individual records, tabulations subdivided by age, sex, city and health unit, are prepared and sent to Alberta on a weekly and on a four-weekly basis. Venereal infection was itself the subject of special tabulations forwarded by the Division to the Department of National Health and Welfare. Many special requests for morbidity information were received during the year from federal and provincial government departments as well as individuals. Extensive information for use in emergency health planning was requested as well as information to be used in determining the distribution of hospital beds in a province and information regarding the course of particular diseases.

During the year the Division published information on police administration, juvenile delinquency and correctional institutions, sent 1963 consolidations of crime and traffic enforcement data to correspondents for verification, released comparative 1962 and 1963 figures on a variety of policing activities, and also prepared statistical material for publication both by the National Parole Board and by the Commissioner of Penitentiaries. For the first time, the Division released statistics on the offences of arson and attempted arson.

In addition to continuing its established collection procedures the Division made arrangements with the Canadian Bankers' Association to obtain reports of robberies and attempted robberies, and of breaking and entering offences and attempts, both as related to the chartered banks, commencing with the 1965 calendar year. After a series of discussions aimed at simplifying the collection and improving the quality of court statistics, the major courts have begun to send in their reports each month, this change having shown a beneficial effect already. In preparation for the introduction of improved methods of reporting penitentiary statistics, a work group of divisional and penitentiary officials met in the Bureau. Crime and traffic enforcement data which were formerly processed by a combination of punched card printouts and desk calculations have now been converted to an automated operation.

A number of feasibility studies have been carried out in connection with the integration of statistics. Other important developments were discussed during

visits to provincial correctional institutions and to probation authorities. Suggestions made were received with approbation, as their acceptance and implementation would bridge long-standing gaps in correctional statistics but to become effective, the proposals would require new resources.

Officers of the Division visited correspondents in the judicial field in order to assist them in the collecting and recording of judicial data. In addition a number of general meetings and conferences were held or attended; among these were the National Conference on Training Schools; the annual meeting of the Canadian Association of Chiefs of Police; the annual meetings of regional police chief associations; the annual meeting of the International Association of Chiefs of Police; and the National Conference on Sentencing. Bureau officers also attended the Third Criminal Law Conference, which was held at Osgoode Hall, Toronto, in April 1964. At this conference the discussions gave those attending an appreciation of the value of statistics both in the administration and enforcement of law, in the carrying out of the correctional process, and an understanding of the technical and resource problems involved in producing statistical information. Besides putting forward a number of specific suggestions, conference members confirmed the desirability of integrating police, court, correctional and aftercare statistics.

INDUSTRY DIVISION

The Industry Division is responsible for the development of a co-ordinated program of industry and energy statistics, for the development of productivity measures for the whole economy and for individual industries and groups of industries. The Division consists of four main sections: Industry Statistics; Productivity Research and Analysis; Energy Statistics; and Shipments, Inventories and Orders. A separate administration staff is responsible for the preparation of the Division's annual general reports on manufacturing statistics for Canada, the provinces and sub-provincial areas, the development and control of the Division's computer processing program and the collection and assembly of data on stocks of critical survival materials for use of the Emergency Supply Planning Branch of the Department of Defence Production.

The Industry Statistics Section is responsible for industry and commodity statistics on an annual and current basis in the fields of manufacturing, mining, forestry and fishing. Comprehensive industrial censuses are carried out each year providing data on value of shipments, employment, payrolls, inventories, cost of fuel and electricity and cost of materials and supplies. Most of these "principal statistics" along with computed "value added" are published by industry, province, small geographic area and by size of establishment and type of ownership. Annual data on thousands of individual material and product items are collected and published as part of the annual census operations. While the annual censuses provide a wealth of integrated statistics, current information on the production and/or shipments of important commodities is of primary importance and a considerable number of commodity surveys on a monthly, quarterly or semi-annual basis are carried out. Results of all these census and commodity surveys are published in a regular series of nearly 300 reports and special statements.

During the past year the major emphasis in the Section was placed on regaining lost timeliness in the release of industry statistics and in the consolidation or completion of projects initiated during previous years. The most

important of these was the completion, for manufacturing statistics, of the change to the new establishment concept together with the compilation of principal statistics on both the "manufacturing activity" and "total activity" bases for the years 1961 and 1962. By year-end, one-third of the 1962 annual manufacturing industry reports had been published on the new basis and the remainder were all in various stages of preparation.

With the completion of the changes in classification and concepts which were carried out over the past few years and which resulted in significant loss of timeliness, considerable progress has been made with respect to the 1963 and 1964 censuses of manufacturing. Through changes in operational procedures and greater use of computer editing, considerable savings have been made in the processing of the 1963 Census of Manufactures which at the end of the fiscal year was over 85% completed. Preparation of 1963 reports started shortly thereafter. This represented a saving of about five months over the 1962 Census. Further progress is anticipated in the processing of the 1964 Census. The 1964 questionnaires were mailed out at the beginning of January 1965, representing a saving of about two months over the 1963 Census. Editing of the 1964 Census will be in full operation by the middle of May 1965.

Some progress has also been made in improving timeliness of publication of the Section's 171 current commodity surveys but late or delinquent response continues to be the chief factor limiting significant gains.

Substantial progress has been made towards the full implementation of the new establishment concept in connection with the annual censuses of mines and logging. It is planned to issue the 1963 reports for these industries on the new basis and to re-work the data back to 1961. Work in connection with the proposed new census of fishing establishments is progressing slowly because of the large amount of information required in the development of a suitable sample frame for surveying small establishments. It is hoped, however, that the first survey will be carried out next year.

During the year the Section was also involved in a number of important new developments. Work was begun on the revised classification of individual items of materials and products reported in industry questionnaires. Based on the Standard Commodity Classification, the implementation of this new classification in the Division's surveys will greatly facilitate comparison at certain levels of aggregation between industrial materials consumed, products shipped, exports and imports. It will also achieve greater consistency of commodity statistics between the numerous industry series and enable the data to be programmed for computer editing and tabulation. More than half of the work has been completed and it is expected that the new commodity classification will be fully implemented in the 1966 Census of Manufactures.

Officers of the Section continued to emphasize personal contacts with officials of firms and associations and made numerous visits during the year. This has led to more understanding and better co-operation on the part of respondents and more satisfactory reporting in a number of areas. In line with the objective of improving liaison between the Section and major users and suppliers of industry statistics, two new committees were formed during the year in the foods and textiles areas. The Canadian Food Processors' Association formed a statistical committee which will represent the industry on the new Committee on Food Processing. In textiles, a new joint Government-DBS-Industry Committee was formed to review the general needs of users in this field and to recommend

changes in existing surveys or the initiation of new surveys as required. The Departments of Finance and Industry and various trade associations are represented on this committee.

As a result of experience with the new Standard Industrial Classification introduced in the 1960 censuses of industry and consultation with users, a number of industries have been redefined and their statistics will be recompiled back to 1957. Among these are Sawmills, Sash, Door and Planing Mills, Railroad Rolling Stock and industries in the printing and publishing field.

In the Productivity Research and Analysis Section, the major development during the year under review was the release of the reference paper *Indexes of Output per Person Employed and per Man-Hour Commercial Nonagricultural Industries, Canada, 1947-63*. At the present time, separate detail is available only for the manufacturing and nonmanufacturing components of the commercial nonagricultural universe, but during the year a program of refinement and extension of the Bureau's aggregate productivity measures was initiated which, it is hoped, will lead to the provision of separate indexes of output per person employed and per man-hour for each industry division in the commercial economy. Work also continued on the development of productivity measures for individual manufacturing industries. Data requirements for six industries were complete or close to completion by the year-end. For three of them, namely Synthetic Textile Mills, Breweries, and Pulp and Paper Mills, draft reports including descriptive background material, technical notes and an analysis of results, were expected to be ready soon for restricted circulation prior to general publication. As part of the computer application for the processing of Census of Manufactures principal statistics, arrangements were made for the provision of a number of analytical ratios. It is expected that these ratios, which are stratified by size of establishment according to the number of persons employed, will provide a useful supplement to the basic productivity ratios, and during the year some experimental analysis was carried out on tabulations of the 1961 and 1962 Census data. Contact was also maintained with important users, such as the Economic Council of Canada, to discuss and anticipate their statistical requirements in the field of productivity. A paper on Canadian sources of data for industrial productivity measures was prepared for the Organization for Economic Co-operation and Development by the Chief of the Section.

In the Energy Statistics Section, the major effort during the past year was placed on the consolidation and further development of projects and surveys undertaken in previous years. An organizational change was effected whereby the current surveys on refined petroleum products and coal, and the annual census surveys of oil and gas producers were transferred from the Industry Statistics Section to the Energy Statistics Section. As a result of the introduction of new reporting forms, a monthly supply-demand series of electric energy was instituted. Considerable progress was also made in improving the timeliness of annual statistics on electricity. In co-operation with the Interdepartmental Advisory Committee on Energy Statistics, intensive studies were carried out on coal statistics with a view to introducing changes in these statistics during the coming year.

In the field of oil and gas statistics, major efforts were made to improve timeliness and by year-end, publications were being released on a more timely basis. In co-operation with the Business Finance Division, new joint reporting procedures were being discussed with representatives of the oil and gas industry. The new approach is designed to improve the statistics reported to both divisions and reduce duplication of reporting while at the same time meeting the statistical

needs of the industry. A new monthly series on supply-demand of natural gas was introduced which supplements the supply-demand statistics on crude oil developed in the previous year. Statistics were also made available for the first time on sales of liquefied petroleum gases, and on sales of major petroleum products by type of customer.

In the Shipments, Inventories and Orders Section, the new establishment concept was implemented in the monthly survey at the beginning of the year on the basis of the 1961 Census of Manufactures results. Revised values for 1960 were also published at the same time and comparable values for 1958 and 1959 have since been prepared and are being distributed on request. The monthly series on Shipments, Inventories and Orders will again be revised during the coming year on the basis of the 1962 Census of Manufactures results. The timing of the annual revisions in the future will depend on the availability of the census data and, as the latter improves in timeliness, so will the up-dating of the monthly series. The Section is now engaged in developing revised values on the new basis for the economic use grouping of the monthly inventories, shipments and orders series. At the same time seasonally adjusted data are being developed for the industry group classes. Coverage of the monthly survey is also being extended to the printing and publishing and sawmills industries, data for which have been heretofore either estimated or based on related information. Last year the distilleries and bakeries industries were surveyed for the first time and the results are now incorporated in the regular monthly series. The Chief of the Section has participated actively in the investigation and resolving of reporting problems resulting from the change to the new establishment and "total activity" concepts in the Census of Manufactures.

In the Emergency Supply Planning Unit, emphasis during the past year was placed on the development of data on drugs and medical supplies as a result of special requests by the Department of National Health and Welfare. Other major developments were the adaptation of the Unit's commodity series to computer requirements and the change in presentation format to assemble all food data on a "district by food group" basis rather than on a "food group by district" basis as in the past. This arrangement now permits all the information pertaining to a district to be assembled in one report.

During the past year, strong emphasis has been placed on applying computer processing to the Division's operations. The computer processing system for the editing and tabulation of the "principal statistics" of the 1961 and 1962 censuses of manufactures was fully implemented. The computer edit has supplemented the regular edit and, in the case of "short" forms returned by small establishments, has replaced much of the manual edit. Tabulations are several times more extensive than formerly but the machine processing costs remain substantially unchanged. Returns for 1963 are now being processed through the system and 1964 returns will follow shortly. Timeliness in editing and tabulation is thus being improved and, with the development of a computer program for photo-reproduction of statistical tables now in process, the time spent in preparation of publications will also be reduced. In the development of this program, allowance is also being made to accommodate requests for special compilations. Divisional methods and procedures are being adapted to the particular requirements of computer processing and the computer application is rapidly becoming a routine part of the Division's operations.

Experience gained during the past year, together with information obtained on major users' statistical needs, are important factors in planning extensions to the computer application. The processing and publication of principal statistics

will be facilitated during the coming year by extending and improving the machine edit of raw data, by the use of the photo-print process and by the provision of additional tabulations for analytical and checking purposes. The main extension to the system, however, will be the processing and tabulation of commodity data, planned for the 1966 Census of Manufactures. Planning for this development will provide for the needs of the Input-Output project and the revision of the Index of Industrial Production. The Division's computer staff is also participating actively with the Central Classifications Staff in the study and use of the Bureau's central list of respondent and standard classifications in computer compilation.

The changeover to computer processing together with the classification and conceptual changes implemented in recent years have resulted in substantial delays in the publication of the Division's annual general reports on manufacturing statistics, including the report containing fine geographic breakdowns of principal statistics and a substantial increase in the number of requests for information and special compilations resulted. These additional demands have originated primarily from the Department of Industry and from the provinces. The increased emphasis now being placed by the provinces on economic planning has resulted in greater pressure for statistical services and for more joint participation in industry surveys.

Among the more important special projects undertaken by the Division in the past year were the recompilation on the revised classification basis of the commodity statistics in the 1959 Census of Manufactures for purposes of the revision of the Index of Industrial Production; the tabulation for publication of the special 1962 survey carried out for purposes of the Input-Output project on containers and shipping materials used by manufacturing establishments; and the assembling and tabulation in co-operation with the National Accounts and Balance of Payments Division of principal statistics, by industry, for foreign-owned manufacturing establishments.

INFORMATION AND PUBLIC RELATIONS DIVISION

During the year the Division continued and improved its activities in the dissemination of information and in answering inquiries. Progress was also made on meeting the Division's other responsibilities and in reorganizing to deal with them on a more adequate basis. These other responsibilities are mainly the improvement of relationships between the Bureau and respondents to DBS surveys and extension of the uses of DBS statistics.

A multi-purpose four-panel exhibit, designed to facilitate the display of literature, was produced during the latter part of the year. It was used with satisfactory results at four conferences and meetings involving the Industry Division and the Education Division. A special display was provided in co-operation with the Health and Welfare Division for a meeting of the Ontario Hospital Association in Toronto.

Pamphlets and other promotional literature were produced and a number of special articles prepared for trade magazines and other special interest publications. Press coverage for conferences was arranged and materials for speeches assembled. Leaflets were produced to promote the distribution of DBS statistical publications with good results being obtained. Articles explaining the signifi-

cance of the annual Census of Industry were published in trade magazines, and other promotion undertaken to bring about wider general use of DBS statistics in these journals. A pamphlet was produced to assist in DBS recruiting activities, mainly at universities. More than 2,500 copies were distributed, mainly on request.

Work was begun on the development of a booklet, designed to better acquaint business firms with the uses that are made of DBS information. A small advisory committee comprising representatives from industry was formed to assist with the project.

A new system of releasing statistical information, in the form of a series of service bulletins, was begun at the end of the year. The system is intended to bring together numerous small items of information previously released individually, with each bulletin serving a distinct "interest area" among the users of DBS information. This should result in better service to the users concerned. The first bulletin to be issued contains information of interest to those concerned with the food and beverage industries. It is expected that if the reactions to the first one are satisfactory several other service bulletins will be started.

The Census Division was provided with publicity support for the 1966 census test in Ottawa in November 1964. This involved press relations work with newspapers, radio and television and the production of a pamphlet for door-to-door distribution in the area concerned, outlining the reasons for the test and listing the questions to be asked.

Planning was well advanced during the year on the publicity activities to be undertaken for the 1966 Census. Cost estimates were developed with the assistance of the advertising agency and the general outlines drawn for the advertising campaign. The Division provided staff support for the Census Publicity Committee which was appointed during the year.

The volume of both telephone and written inquiries continued to increase during the year and staff of the Division received numerous visitors to the Bureau seeking information. Written inquiries were handled at a rate of between 30 and 35 daily. In many cases, materials for replies had to be assembled from a number of sources and in some instances special tabulations were made. The majority of the inquiries received were from sources within Canada but they included many requests from foreign countries.

During the year, 251 issues of the Daily Bulletin were published, summarizing for the benefit of users and the press, the daily output of DBS information. The Bulletin had an average circulation of about 1,600 English and 300 French copies per issue. The Weekly Bulletin was published each week, with a total circulation of some 1,650 copies per week.

The 1964 edition of the DBS Catalogue of Publications was issued in March 1965. The new edition brought the listings of DBS published material up to date to November 1964, and revised the listings contained in the second edition published in 1960 and the supplement of 1962. The new catalogue contained a combined title, subject and commodity index for greater convenience to the public. It replaces the separate title, commodity and subject indexes which had appeared in the DBS catalogue previously. All title changes, new titles and discontinued titles which had occurred since the publication of the earlier catalogues are listed in the main body of the new edition and in separate sections. This provides the public with a picture of the developments that took place in the DBS publications program in the period since the former catalogue

was published. The catalogue also lists 1961 Decennial Census publications and, in addition, incorporates the changes in the publications of the DBS Industry Division that resulted from the adoption of the revised Standard Industrial Classification.

LABOUR DIVISION

The Director of the Division, Mr. H. F. Greenway retired in February 1965 after some thirty-six years' service in the Bureau. Mr. D. J. Bailey is the new Director of the Labour Division which consists of three Sections: the Employment Section, the Unemployment Insurance and Pensions Section, and the Research and Analysis Section. The Employment Section collects industrial establishment records of employment, hours of work and wages and salaries; it publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The Unemployment Insurance and Pensions Section provides the Unemployment Insurance Commission with operational statistics. It also publishes statistics of public interest concerning persons covered by unemployment insurance and persons claiming benefit as well as statistics of private pension plans from an annual survey of trustee plans. The Research and Analysis Section issues labour income estimates giving industry and area totals and undertakes research and analysis pertaining to the general field of labour statistics.

The Employment Section continued the regular program of preparing statistics of employment, hours and earnings. This program consists of a monthly survey of employment, hours and earnings in larger firms, a monthly sample survey of employment in smaller firms, and a detailed annual survey of hours and earnings in manufacturing. In co-operation with a team of management analysis specialists, a thorough study was made of clerical operations connected with the monthly Survey of Employment and Payrolls. As a result of this investigation overall efficiency was increased by a number of changes in procedures and the transfer of all more routine calculating operations to the Tabulating Services Division. The schedule for the monthly Employment and Payrolls Survey was reviewed and the format and instructions revised for greater ease of completion. The revised schedule was used experimentally for a sample of firms in mid-summer, receiving favourable comment, and was then instituted in January 1965.

The initial issue of a new monthly publication *Estimates of Employees by Industry and Province* was distributed in March 1965. The data in this publication combine the results of the regular large firm survey and the sample survey of smaller firms to provide industry by provincial aggregates for the commercial nonagricultural sector of the economy. As the initial step in a program to obtain employment data for industries not covered by the regular employment surveys described above, a monthly survey of hospital employment was initiated in January 1965. Preliminary arrangements were also made to undertake a monthly survey of employment in education.

Work was continued in connection with the revision project involving transfer of the monthly survey of Employment and Payrolls to the new Standard Industrial Classification code, implementation of the standard establishment concept, adoption of new geographical code and conversion from a 1949 to a 1961 base. It is anticipated that this long-run project can be completed early in 1966.

In addition to continuing its regular program of unemployment insurance and pensions statistics, the Unemployment Insurance and Pensions Section undertook a number of special projects. At the request of the Unemployment Insurance Commission, a senior officer of the Section revised those sections of the Commission's Contribution Manual concerning statistics, which were later reviewed and adopted at a conference of the Unemployment Insurance Commission Regional Contribution and Coverage Officers. Technical advice and assistance was provided the Unemployment Insurance Commission and the Department of Agriculture regarding proposals for extension of unemployment insurance coverage to agriculture. The assistance included conduct of a study using records held in the Section for persons giving agriculture as their current or most recent industrial attachment.

In co-operation with the Unemployment Insurance Commission, the Section undertook preparation of statistics concerning those issued Social Insurance Numbers during April to June 1964. The statistics produced from this source included data annually prepared for the insured population together with information concerning the personal characteristics, industrial and occupational attachment of uninsured persons who obtained Social Insurance Numbers. Arrangements were made to further extend computer applications to the tabulation of unemployment insurance statistics. For example, in conjunction with the establishment of a new continuous work history sample necessitated by the assignment of Social Insurance Numbers to persons covered by unemployment insurance, the processing of the continuous work history sample maintained in the Section is being transferred to the computer. Hence, certain processes formerly executed manually in the Section will now be carried out by computer. This was expedited in order to utilize the magnetic tape obtained from the Department of Finance providing basic information for the establishment of the new continuous work history sample, and for new Social Insurance Numbers issued subsequently.

The annual Trusteed Pension Plans survey was reviewed and a number of improvements made in both the survey schedule and format of the published report. Preliminary plans have been made for a survey of the nonfinancial statistics of all private pension plans to be carried out in 1965.

A senior officer of the Section represented the Bureau at meetings of the Interdepartmental Task Force Committee on the Canada Pension Plan. Officers of the Section also attended meetings of the Interdepartmental Committee on Canada Pension Plan Subcommittee on Statistics. A detailed report on private pension plans in Canada was prepared as a background document for the joint Senate-Commons Committee on the Canada Pension Plan. Officers of the Section participated in preparation of a report outlining the statistical possibilities of the Canada Pension Plan. This report was circulated among federal government departments and a number of provincial departments of labour.

A long-range research program was designed by the Chief of the Research and Analysis Section and a start was made on selected projects. Work continued on the revision of estimates of labour income 1951 to date to take account of the new Standard Industrial Classification and the new establishment concept. The publication of the monthly, quarterly and annual estimates of labour income was also maintained.

A number of commissioned projects were undertaken for outside agencies including a study of the occupational patterns of older workers between 1951 and 1961 for the Canadian Welfare Council, and a study of the length of the average work-week in the post-war period for the Canadian Broadcasting

Corporation. Several projects were also undertaken for the Economic Council of Canada. In co-operation with the Special Surveys Division, a Work Experience Survey and a survey of Educational Attainment were planned, and taken in January 1965 and February 1965, respectively.

The Section played a major role in preparing a reference paper to be published in conjunction with the issuance of the new monthly publication providing employment aggregates by province and industry. Senior personnel of the Section participated in preparatory work in connection with the new monthly survey of employment in hospitals which was initiated in January and a similar survey of education planned for later in the year. The planning of these surveys was carried out in co-operation with the Health and Welfare, Public Finance and Transportation, and Education Divisions.

The Section has the responsibility for the preparation of labour input measures for global productivity indexes. During the year, indexes of employment and man-hours worked in the commercial nonagricultural industries of the economy for the period 1947-63 were prepared. A reconciliation study of estimates of paid workers for the same period obtained from the Employment Survey and Labour Force Survey was also completed.

MERCHANDISING AND SERVICES DIVISION

This Division was set up to provide a wide range of statistics on the retail, wholesale and service trades and on specific aspects of distribution not necessarily limited to these trades, such as advertising expenditures and channels of distribution. In the past, the Decennial Census of Merchandising and Services has made available statistical information within structural classifications, whether by trades or by groupings of businesses according to ownership, affiliation and by geographical distribution down to the level of census tracts in metropolitan centres. This information has been quite extensive, including commodity detail of sales. Intercensally, sample-type surveys are maintained to permit estimates of total business done and inventories held at the retail and wholesale level, and for department stores and corporate chains. Estimates are also made for consumer credit extended by retail businesses and some financial institutions. In the service trades seven important trades are covered annually.

During the year, proposals were put forward designed to modernize the statistical approaches and to provide the necessary supporting organization. As a result of these, the Census timing is being changed from decennial to quinquennial, beginning with 1966. At the same time, the Census enquiry is being limited to exclude fine detail of commodities sold and operating expenses; the detail will be sought by sampling as a post-Census effort in each intercensal period. As a result of these changes, the basic data provided by the Census will be available more frequently and with a minimum time-lag between the period surveyed and the date of publication, while the detail to be secured by sampling will be available more frequently and will be part of a flexible sampling program in which priorities can be developed according to the current needs of users. Going beyond this, statistics for wholesale trade are being developed on an annual, total-coverage basis, and will remain within the Census framework in the quinquennial years only to the extent required to ensure across-the-board comparisons. The Census Section of the Division consists of a permanent nucleus staff into which is incorporated both subject-matter and operational activities. In the current (non-Census) area, subject-matter and operational activities are

divided. Three subject-matter sections have been set up: the Current Statistics Section uses the store as the statistical unit of measure and includes all monthly and quarterly surveys of sales, inventories, credit, as well as special surveys of department stores, corporate chains, discount houses and shopping centres; the Special Surveys Section of the Division is responsible for current surveys and uses the establishment as the statistical unit including all surveys of gross trading margin, operating expenses, and such special surveys as total advertising expenditures and manufacturers' channels of distribution; and the Research and Development Section of the Division is responsible for the development of employment and payroll data, and measures of productivity, together with specific problems of quality and integration. Surveys required by these three subject-matter sections will be undertaken by the Current Surveys Section which has been subdivided into units reflecting basic survey approach divisions; the Full Coverage Unit, the Sample Surveys Unit and the Special and Occasional Surveys Unit.

Work connected with the final stages of the 1961 Decennial Census of Merchandising and Services was further advanced by the publication of eight bulletins dealing with retail trade and the service trades, and with three other bulletins in various stages of the printing process. In addition, special releases of commodity data for retail trade are now under way and a preliminary release on wholesale trade at the total level was made. It should be noted that the bulletins already published for retail and services deal with data reflecting the activities of individual stores or business locations and they present the same range of "store type" data as has been available from the total effort in the past censuses. The bulletins still to be released during the year 1965-66 represent an additional effort undertaken for the 1961 Census to collect complete and more detailed employment and financial statistics from the ownership entity rather than the individual business location in all cases of multi-activity and/or multi-location businesses. This latter effort enables the Census to present a set of statistics in conformity with the important purposes of the "new establishment definition" adopted for DBS as a whole.

The results of the Channels of Distribution survey covering manufacturing industries for 1961, and taken in conjunction with the Merchandising Census, will be published early in the new fiscal year. The reconciliation of these data with the final revised data to be published on manufacturing for 1961 has been carried on during the year and has delayed the release of figures longer than originally anticipated.

In addition to the foregoing, a good deal of ground work was done in connection with the analysis of retail, wholesale and service census results, in preparation for the release of the respective introductory bulletins and administrative report. This work involved relating data for the 1961 Census with previous censuses and describing in detail the method by which the Census of 1961 was conducted. Other tabulations were produced for the census monograph "Trends in Canadian Merchandising", business users, and the Emergency Measures Organization.

In preparation for the 1966 Census the redesign of enumeration documents has been undertaken and tabulations have been prepared to assist in planning the distribution of material to be used by enumerators in securing listings.

In the field of Current Statistics, the standard monthly and quarterly series were maintained and published, the samples used being those devised from the Census of 1951. During this period, work was advanced on the new retail trade

sample, based on the Census of 1961, and it is expected that the new sample will be operative in a few months' time, with a bridge of some eighteen months. The introduction of the new sample has been somewhat delayed, due to a desire to introduce computer application in all stages, including the later production of monthly estimates. It has seemed wise to make this investment in terms of obvious long-term improvements and resource savings. Tied to the delay in introducing the new sample has been the withholding of three annual reports, i.e., *Chain Stores*, *Shopping Centres* and *Annual Retail Trade*. Such annuals must reflect the new definitions and classifications used in the 1961 Census; until the new 1961 sample becomes fully operative, annuals based on 1961 will present data in conflict with current estimates still based on 1951. However, this situation will adjust itself over the coming year.

In addition to the introduction of new samples following each Census, estimates for intercensal years based on a sample designed from the previous Census must be checked against the benchmark results of the new Census and necessary revisions made. The difference between the 1961 estimates of retail sales (based on a 1951 sample) and the actual totals resulting from the 1961 Census have been assessed by trade and province. The first steps of planning the method and procedure of revising the estimates based on the continuing sample have been completed; the actual revision remains to be carried out. In the area of new surveys to be considered as part of the modernization program, considerable progress was made.

The first part of the retail trade operating results series which was designed to cover the universe in a three-year cycle was carried out during 1964 for the year 1963. This part of the project covered the food trades with a mailing list of 9,959 firms. The survey was designed to yield operating expense data for the three main segments of the food trades:—corporate chain stores, voluntary affiliated independent stores and non-affiliated independent stores. Both the corporate and voluntary chains were covered in total while the non-affiliated independent stores were represented by a sample, with a fairly good response. Processing of returns is almost complete and figures for food chains should be available soon followed by unaffiliated independent stores and voluntary affiliated independent stores. It should be noted that this survey cuts across other regular surveys such as voluntary chain stores, independent retail stores and corporate retail chains. To avoid the adverse effect of double canvassing, the operating results questionnaires were designed to yield data required for the other surveys. Plans are being finalized to cover the general merchandise, apparel and accessories, and the hardware and home furnishings group for 1964.

The survey of voluntary chains for the year 1963 was in fact a survey of affiliated independent food stores, rather than of all stores linked on a voluntary basis. As mentioned previously, the survey of operating expenses in retail trade was designed to yield the information required for this survey. Plans for the 1964 survey included voluntary groups in all kinds of business.

The first phase towards a complete census of wholesale trade was implemented early in 1964 by the mailing of forms covering the 1963 business year to some 13,000 wholesale establishments in the wholesaler proper category. Timing for this first attempt was handicapped by the fact that lists from the Census were not available and the list used had to be taken from the records of an experimental survey undertaken for the year 1958. A more up-to-date list was provided by the 1961 Census in July of 1964 which, after a matching process, gave another 14,000 establishments, which were surveyed as an additional mailing. The remaining sectors of wholesale trade—agents and brokers,

manufacturers' sales branches, assemblers of primary products and bulk tank stations—will be added to the 1964 survey. This will increase coverage by about 7,500 more establishments and will complete the wholesale trade universe.

In the Research and Development Section, plans were agreed on for intensive analysis of the employment and payroll data available from the 1961 Census. Data available for paid full-time and part-time employees, for working proprietors and for unpaid family workers permit the calculation of all employees in full-time, man-year equivalents, and very roughly, in man-hours. The full processing and analysis of these data will be spread over a considerable time, but should provide a major study of labour-input, seasonal shifts, and total job opportunities in the Census year. In addition, a series of historical tables were prepared covering number of stores, employment, sales and gross trading margin, for significant retail trades, together with graphs of change calculated in several significant ways. These tables will provide basic historical background for the more intensive work in the field of productivity as presently contemplated, and may be recommended for publication at a later date.

Developments in the possible use of lists of merchandising business and sales data collected by other departments, both federal and provincial, have been furthered to some extent during the year. Close co-operation has been established between the Alberta Provincial Bureau of Statistics and the Merchandising and Services Division concerning the use by both of an annual merchandising survey and a monthly survey of wholesale trade. This has involved the development of mutually acceptable classification systems and questionnaires and the careful checking by DBS of some 20,000 licensees included in the Alberta surveys. In four other provinces, Nova Scotia, New Brunswick, Prince Edward Island and Ontario, the emphasis has been on the use of sales tax data, and in each case, acceptable classification systems have been worked out which tie into the DBS classification and also make possible comparisons between provinces. Much detailed work remains to be done before regular tabulations of data from these sources can be secured, but the detail has been studied and the difficulties are not insurmountable. In any event, usable lists of retail businesses will be available to DBS from these provinces. This program will be extended to include more provinces next year.

NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS DIVISION

This Division, in its general responsibilities, is concerned with a wide range of economic statistics which includes the principal comprehensive statements and indicators relating to the Canadian economy. The preparation of these statistics for the publications which are described below involves the co-ordinating, processing and analysing of information from a variety of sources as well as some direct collection. The scope of information covered in these publications extends over the whole ambit of the organized output of the Bureau and beyond, providing a set of macroeconomic data relating to the Canadian economy. The data are used by economists and others concerned with observing the course and performance of the Canadian economy and advising on policy.

Recent extensions of government activity in the sphere of economic analysis and investigations have augmented demands for macroeconomic data produced in the Division such as the national accounts and real output. These data and many supplementary series relating to them including seasonally adjusted series

are parts of the systems of economic intelligence used by official groups concerned with considerations of long-range economic problems as well as of more current trends. The meeting of these new requirements for data as well as the continued assessment and use of new statistical data originating in other divisions in the construction of economic accounts has been absorbing increasing resources. For example, the development of statistics of financial flows involves frequent consultations and is leading to reassessments of certain aspects of the economic accounts already developed.

During the year, quarterly publication was instituted of indexes of "Real Domestic Product Less Agriculture" which had been first introduced in the previous year; these indexes are now a part of the monthly report *Index of Industrial Production*.

In the balance of payments field, there has continued to be close public attention to statistics relating to this subject. Contributing to this have been the passage of the Interest Equalization Tax legislation in the United States in 1964 with the granting of exemptions to Canadian new issues, the change in the position of sterling in the latter part of 1964, and more recently the announcement in the United States by the President of measures designed to bring the United States balance of payments into balance. As a result of this international background, normal demands for balance of payments information have been increasing.

The principal recent developments in information in the balance of payments field have been some extensions in data relating to short-term capital movements, and the quarterly publication of the geographical distribution of net movements of long-term capital. In the field of travel statistics, new monthly details are now available on the countries of origin of non-immigrant travellers to Canada from overseas countries, and new arrangements have been introduced for sampling the expenditures of Canadian travellers returning from the United States. International investment records are being jointly used with the Industry Division in assembling statistics relating to manufacturing in plants owned by foreign controlled companies.

PRICES DIVISION

The function of the Division is to collect, compile and publish data on prices and on consumer expenditure. The Division consists of five sections: Retail Prices, Consumer Expenditures, Wholesale Prices, Farm and Special Purpose Prices, and International Prices. The principal emphasis in the prices program is on the construction and publication of price indexes but data on average prices are published for selected commodities. Surveys of urban consumer expenditure are conducted biennially to provide a basis for revising the item content and item weights in the Consumer Price Index. The resultant body of information on expenditures of Canadian families is published and is widely used by business organizations and welfare agencies.

The Retail Prices Section confined most of its activities during the 1964-65 fiscal year to immediate current problems arising in the production and publication of the Consumer Price Index. Toward the close of the year, the extensive review of retail price survey procedures and techniques initiated in 1963 was revitalized. This review includes an evaluation of alternative ways and

means of collecting prices and measuring price changes of commodities and services purchased by urban families of given size and income. In addition, the index item content and weighting pattern will be revised in accordance with 1962 urban family expenditures and the price reference base will be updated to 1961 from 1949.

Publication of *Residential Rents in Major Canadian Cities* was deferred pending completion of a study analysing sources of sampling variance evident in the rent data. As a result of the redesign of the Labour Force Survey frame, used for the rent survey, tabulation procedures were adjusted to reflect the differences throughout Canada in sampling ratios arising during the transition stage. Additional study of sampling variance in selected cities was initiated to appraise the effect of location within a city on reported rents, and to determine the relative importance of various services included in rents.

The major development in the Consumer Expenditure Surveys Section was a recall survey of the complete family budget, taken in February-March 1965 to cover the calendar year 1964. This survey was similar in purpose to the 1959 survey, in that it was designed to obtain expenditure information for all families and individuals regardless of income level, and was thus broader in scope than the restricted surveys of 1953, 1955, 1957 and 1962, which were directed primarily towards uses in connection with the Consumer Price Index. The 1964 survey, although similar in size to the 1959 survey, referred to eleven urban areas instead of all cities of 15,000 and over, as in 1959. The intention was to provide more adequate samples for larger cities, rather than regional coverage with relatively small samples in individual cities. Approximately 3,000 households were selected from households which had participated in the Labour Force Survey earlier in the year. Field work was carried out by the regional offices of the Special Surveys Division.

Because of the enlargement of the complete budget survey, no inquiry into family food expenditures was carried out in 1964. Activities in the Section were mainly concentrated on analysis of the 1962 survey of urban family food expenditure, planning and preparation for the 1964 survey, and work connected with the computer edit for the 1962 complete budget survey. Plans for processing the 1964 survey were based on 1962 experience and include more comprehensive preliminary hand edits in areas where the 1962 electronic edit was proven to be unsatisfactory or uneconomical. In addition to work on current and future surveys, a considerable quantity of information from the 1959 survey was issued in answer to special requests.

During the fiscal year 1964-65, developmental work in the Wholesale Prices Section was largely devoted to revising the Industry Selling Price Indexes relating to manufacturing, to a 1961 base. This involves the revision of both the commodity content and weighting patterns, and the price reference period. The number of prices included in each industry index has also been expanded. It is expected that the revision will be completed during the coming fiscal year.

Further progress was made in developing input price indexes of manufacturing industries and output price indexes of mining industries. A substantial number have been completed in both cases. The input series include indexes of materials used and fuel and electricity, and the output indexes relate to industry selling prices.

In addition to indexes of prices of farm products and prices paid by farmers, the Farm and Special Purpose Prices Section prepares and publishes price indexes of industrial materials, highway construction, building materials and common and preferred stocks. Revision and developmental work was pursued in connection with most of these indexes during 1964-65.

The revision of the weighting pattern and item content of the Prices Paid by Farmers Indexes was begun in 1964, based on the Farm Expenditure and Income Survey. A review and revision of concepts and methodology has also been undertaken. Input price indexes relating to farm operation will be published late in 1965 on a 1961 price reference base.

The coverage of the Price Indexes of Highway Construction in Canada 1956=100 was expanded as additional cost data were acquired. Late in the year, a start was made on the revision of these indexes to a 1961 base. Continued progress was made in the collection and analysis of construction cost data from public and private electrical utilities. Preliminary indexes for the transmission, distribution and stations (switching and transformation) components of the Electrical Utility Construction Price Index were completed toward the end of the year. A pricing program for inputs into hydro and thermal generating plants was initiated in 1964.

In order to assist in the determination of appropriate allowance levels for civil servants stationed outside Canada, the International Prices Section analysed living cost surveys carried out at about sixty locations abroad, and reviewed studies previously undertaken at approximately twenty foreign locations. In addition, the Section processed surveys of comparative price levels and accommodation costs encountered by Canadian military personnel stationed in Western Europe. Discussions have been held, during the course of the year, with representatives of the Treasury Board and other federal government departments regarding the results of the food and domestic fuel and utility cost surveys carried out at over two hundred isolated locations within Canada.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

The function of this Division is to produce statistics on the financial structure of all levels of government in Canada with details on numbers employed and payrolls, the performance and financial condition of rail, road, water, air, pipeline, other forms of transport, communications media and other public utilities.

Plans are well under way to further develop municipal government employment and payrolls data. It is intended to continue surveying all urban municipalities with a population of 10,000 or over and in addition a sample survey will be made of all smaller urban municipalities and all rural municipalities.

At the request of the Treasury Board, the Civil Service Sick Leave Survey was redesigned and is now known as the Benefit Usage Survey. Coverage was changed to obtain more information concerning certain classes of federal government employees.

The Division assumed responsibility for the preparation of a quarterly analysis of the balance sheet of the Government of Canada designed to produce a flow of funds statement. This analysis is a logical extension of the income and expenditure analysis used in connection with the National Accounts in that it indicates the nature of the assets acquired and the liabilities incurred or discharged which are relative to income and expenditure transactions.

For some time it has been apparent that the analysis of government expenditures by economic categories should be reconciled to the classification of expenditures by function. These two classifications have been combined in one table providing a broader framework for fiscal management analysis and economic forecasting. A table of this nature analysing federal government expenditures has been published and similar tables for provincial and municipal governments will be issued in a few months. Working in co-operation with the federal-provincial Tax Structure Committee, this Division undertook a comprehensive review of financial statistics of all governments in Canada covering the period 1952 to 1962. The review covered revenue, expenditure and debt transactions. These statistics will be presented as a published document in the late fall of 1965. To eliminate duplication, arrangements have been made to have the New Brunswick Department of Municipal Affairs collect current revenue and expenditure data from municipalities in that Province. Under this sch me one collection system will provide the information required by the Department and this Division. A similar arrangement is in effect in the Province of Quebec.

The Expenditure Coding Committee of the Government of Canada, with representation from this Division, met on a number of occasions for the purpose of designing a system of coding federal government expenditure accounts in a manner best suited to meet the requirements of various federal government agencies.

Considerable progress was made in developing a new series of statistics on the activities of community television antennae systems. A reporting schedule has been designed which will meet the requirements of DBS, the Department of Transport and the National Community Antennae Association. An annual survey will be initiated within the next few months. With the assistance of the National Advisory Committee on Telephone Statistics and the National Advisory Committee on Broadcasting Statistics, considerable revisions were made to reporting schedules. The DBS working with the National Advisory Committee on Telephone Statistics compiled a glossary of technical terms for use in DBS statistical publications.

Considerable progress was also made with respect to the introduction of the Standard Industrial Classification to transportation statistical series. This classification system and the establishment concept was discussed with a number of transportation agencies including the major railways and steamship lines.

Arrangements were completed to revise the annual *Water Transportation* and *Civil Aviation* reports so as to differentiate between establishment and activity statistics.

With the assistance of the Canadian National and Canadian Pacific Railways a revised edition of *Uniform Canadian Classification of Railway Employees* was completed. The revised edition is expected to improve the quality of railway

employee data. A committee consisting of officials of the Board of Transport Commissioners, the major Canadian railways and DBS, known as the DBS Advisory Committee on Rail Transport Statistics, was organized during the year and two subcommittees were formed. One subcommittee was directed to examine the railway organizational structure and identify establishments in a manner consistent with the Standard Industrial Classification and arrange for reporting to DBS according to the establishment concept. The second subcommittee was directed to arrange with the railways for the reporting of commodity statistics according to the Standard Commodity Classification. Because the American and most Canadian railways are using the new United States Standard Transportation Commodity Classification System arrangements were made to produce a convertibility tape to enable Canadian railways to convert and report commodity data to DBS according to the Standard Commodity Classification.

The review of the Motor Transport Traffic Survey was continued. A number of important changes were implemented in 1964 including a major reduction in the size of the sample. A number of other studies are under way with respect to this survey which will improve the collection and analytical operations. One of these studies is the feasibility of transferring the survey to the electronic computer. Computer program specifications for the Province of Alberta have been prepared. A new series entitled *Motor Carrier—Freight Quarterly* was introduced in 1964. The series includes operating revenues, expenses, number of employees, tonnage and operating ratios for for-hire intercity carriers. The new report met with highly favourable response from the industry. A comprehensive review was made of the commodity classification code system used in the production of freight traffic statistics for water and road transport. A revised condensed version of the Standard Commodity Classification was introduced into the road, shipping and canal statistics series permitting more precise intermodal comparisons and convertibility between these series.

In co-operation with the Canals Division of the Department of Transport a review of their method of collecting statistics concerning canal operations was conducted. As a result a joint questionnaire was devised replacing some 15 questionnaires formerly in use.

An extensive analysis of shipping statistics covering the period 1959 to 1963 was completed for the Royal Commission on Pilotage showing a breakdown of port activity by pilotage districts. The analysis covered the operations at 375 ports.

The requirements of the Canadian Maritime Commission for statistical analysis of shipping operations were considerably expanded. The Division now provides the Commission with monthly vessel activity data showing commodities carried and ports of call by the 300 Canadian registered vessels of 1,000 gross tons and over. Arrangements were also made to have the National Harbours Board use a condensed version of the Standard Commodity Classification commencing January 1, 1965. The Classification will be used by the Board in coding commodities transported into and out of the eight ports under the jurisdiction of the Board. This arrangement will provide greater comparability between the data produced by the Board and this division.

Arrangements were completed with Air Canada to code commodities transported according to the Standard Commodity Classification. Assistance was provided the Emergency Measures Organization to develop a survey of private

and for-hire truck fleets in Canada. Assistance was also provided to the External Trade Division of DBS in its development of an annual report on exports by mode of transport.

SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for operation of the field offices of the Dominion Bureau of Statistics. Current information on many topics is obtained by part-time interviewers, working under the supervision of the different Regional Offices, who interview each month a scientifically selected sample of approximately 32,000 households across the country.

Each month, questions on labour force activity are asked and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five main regions of the country. At the same time, enumerators inquire about rents paid and the information elicited is used to compile the rent components of the Consumer Price Index. Special questions are added from time to time to obtain a variety of other information. For instance, in the May 1964 survey, special questions were asked dealing with household facilities and equipment available in Canadian homes. In the August 1964 survey, at the request of the Department of National Health and Welfare, special questions were asked dealing with the smoking habits of Canadians. In the January 1965 survey, additional questions were asked which will permit the analysis of individual work patterns and stretches of unemployment during the twelve-month period of 1964.

As part of their continuing duties, the Regional Offices collect monthly data on retail prices and services for use in compiling the Consumer Price Index. They also maintain, for the convenience of local business firms and others, a file of all current DBS publications. The collection of business reports, which other divisions of the Bureau have not been able to obtain by mail, is also carried out through these offices.

Good progress was made in the redesign of the sample of households used in the monthly Labour Force Survey, which was introduced during 1963. The new sample was introduced in Alberta in March 1964, Prince Edward Island in July 1964, Nova Scotia in October 1964 and in New Brunswick and Quebec in February 1965. It is scheduled for introduction in the remaining five provinces during 1965. The new sample design uses the most recent Census data and incorporates new technical features to improve its efficiency and accuracy. Before being adopted for each province, it is completely field tested over a three-month period and detailed comparisons are made of the results obtained from the new sample and the old. To date, those differences have been within the range that can be readily attributed to normal sampling variability and the new sample gives evidence of being quite superior to the old.

One important general feature of the new design is the ease with which it lends itself to modification as abnormal shifts and growths in population occur over time. The new sample design automatically reflects population growth. However, this can be more accurately done under the new sample design by means of simplified procedures for modifying the sample in those city areas

experiencing heavy new residential construction. In most large cities, large apartment buildings are sampled separately and as new ones are constructed, sampling is automatically extended to cover them also.

DATA PROCESSING SERVICES

The large-scale processing of statistical data at the Dominion Bureau of Statistics is undertaken by the Tabulating Services Division in conjunction with the Central Programming Division. The two Divisions work together to improve the processing services of the Bureau using the equipment most suitable for the purpose. A senior committee, under the chairmanship of the Dominion Statistician, meets monthly and guides the allocation of computer and programming time. Long-run schedules for computer utilization are being developed in order to ensure orderly utilization of these facilities and to ensure proper priorities.

Tabulating Services Division

The subject-matter divisions of the Bureau gather data which form the basis for statistical tables and the Tabulating Services Division provides a service, using a variety of methods, to process the data reducing it to more manageable form for further analysis. Broadly speaking, there are three methods of data processing in use in the Division.

When aggregates only are required involving a minimum of cross-classification, they are produced directly as a clerical operation by means of peg-bar methods of compilation using comptometers and desk calculators. This group of operators handles a considerable volume of data, particularly where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work, as well as special projects involving more complicated calculations.

Next in order of complexity from a tabulation point of view are the many Bureau projects involving more difficult manipulation of the data and a number of more complex cross-classification. For these, the Division uses a wide variety of unit record (punched card) equipment. Operators record the data from the source documents onto punch cards, about one half of them punching the cards and the other half verifying them independently for accuracy. Editing of the data by mechanical means and seeking out inconsistencies which may arise through misinterpretation of instructions and definitions governing the collection of data and errors in recording answers are important functions of the unit record tabulation. Another group of operators uses other punch card equipment, such as sorters, tabulators, reproducers and collators, to group the punch cards by the various characteristics of the data and to produce the totals required.

To handle the larger and most complex applications, an electronic computing facility was established in 1961 in the Dominion Bureau of Statistics. Although the greater part of the time of the computer is allocated to the work of the Bureau, some requirements of other government departments and agencies have been accommodated on instructions from the Interdepartmental Committee on Electronic Computers. The installation consists of an IBM 705 computer system and two IBM 1401 computers, one of which was acquired in October 1964 and as a result, unit record tabulators are gradually being released with a consequent

net reduction in operating costs. Throughout the year, the computer operations were on a two-shift, five-day per week basis with some week-end work as well, making a total of 5,600 productive hours on the 705 computer system and 5,700 productive hours on the 1401 computer system.

In the 1964-65 fiscal year, in excess of 26,000 hours were used on various types of tabulating equipment (exclusive of auxiliary equipment such as sorters, reproducers and collators), using a total of approximately 27,800,000 punch cards and 2,300,000 sheets of original tabulations.

A technique was recently developed within the Dominion Bureau of Statistics whereby a medium-sized computer was programmed to simulate the action of various types of unit record equipment. The projects handled by the unit record equipment were analysed to determine the specifications for such a program. From this definition of what was required, three programs were developed which provided the features necessary. Thus instead of wiring a control panel for a unit record application, or writing a special program for each step for a computer application, control cards were specified for each tabulation. This operation requires less set-up time than was formerly required for unit record equipment although it is less efficient than a specialized program. However, it provides a satisfactory transitional method until programmer time is available to program a continuing operation. It is also an efficient method for handling one-time applications where programming effort would be excessive in comparison with machine time.

The processing of the 1961 Census continued to absorb a large part of the computer time during the year. The first stages of preparation for the 1966 Census were undertaken with the commencement of planning and program testing. During December and January, the results of a census field test were processed through the "document reader" and the first edit stages prior to authorization to proceed with the printing of the questionnaires.

In addition to the regular projects of the Bureau, a number were undertaken for other government departments and agencies on a cost-reimbursement basis under individual agreements.

Central Programming Division

The principal functions of the Central Programming Division are systems analysis in collaboration with subject-matter divisions, and programming for projects approved as computer applications by the DBS Electronic Computer Committee. In some cases investigation indicates that punch card or other methods of processing can produce the desired product just as timely and more economically than could be done by computer processing. An attempt is also made to eliminate routine types of manual editing, coding and other clerical operations by substituting computer processing, thus freeing clerical staff for other aspects of statistical data collection, processing, analysis and publication.

During the current fiscal year, there has been an increasing demand for feasibility studies and systems analysis studies prior to consideration of proposed computer applications by the DBS Computer Committee. This has meant a shifting of analysis work from the senior analysts to junior programmer analysts. Generalized programs are now in widespread use but these will continue to require a good deal of maintenance time.

The Central Programming Division, which consists of two sections, wrote a total of 439 programs during the year under review. The Scientific Programming Section works closely with the Sampling and Survey Research Staff, the Research and Development Staff and economists and statisticians in subject-matter divisions, to produce and modify a variety of programs for analysis of tabulated data, seasonal adjustment of time series, and the institution and improvement of sampling technique. Programming time of the Scientific Programming Group was almost all spent on work for DBS divisions. The Data Programming Group spent thirty per cent of their time on work for the Census Division, both in preparation of the 1966 Census and in monograph and special purpose projects resulting from the 1961 Census; work of other DBS divisions used fifty per cent while requests from other federal departments or agencies occupied over fifteen per cent of this group's time.

Programming resources continue to be a limiting factor. During the year under review, there were four separations and eight additions to the staff. The Bureau continues to co-operate with the Civil Service Commission in providing training in their "trainee recruitment" plan. One course in Fortran programming was given to mathematical statisticians in the Bureau.

DBS is co-operating with the Civil Service Commission in a University Computer Programming course whereby students alternate between university lectures and "field training". In addition, trips were made to the Massachusetts Institute of Technology in connection with hospital statistics; to the University of Chicago in connection with factor analysis programs and to the United States Bureau of the Census. Also, during the year, visitors from Pakistan, Trinidad and the United States spent some time with the staff of the Programming Division.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general administration, staff organization, financial control and publications distribution, forms control and office services such as the addressograph unit, drafting unit, stenographic pools, supplies, mail and messenger services.

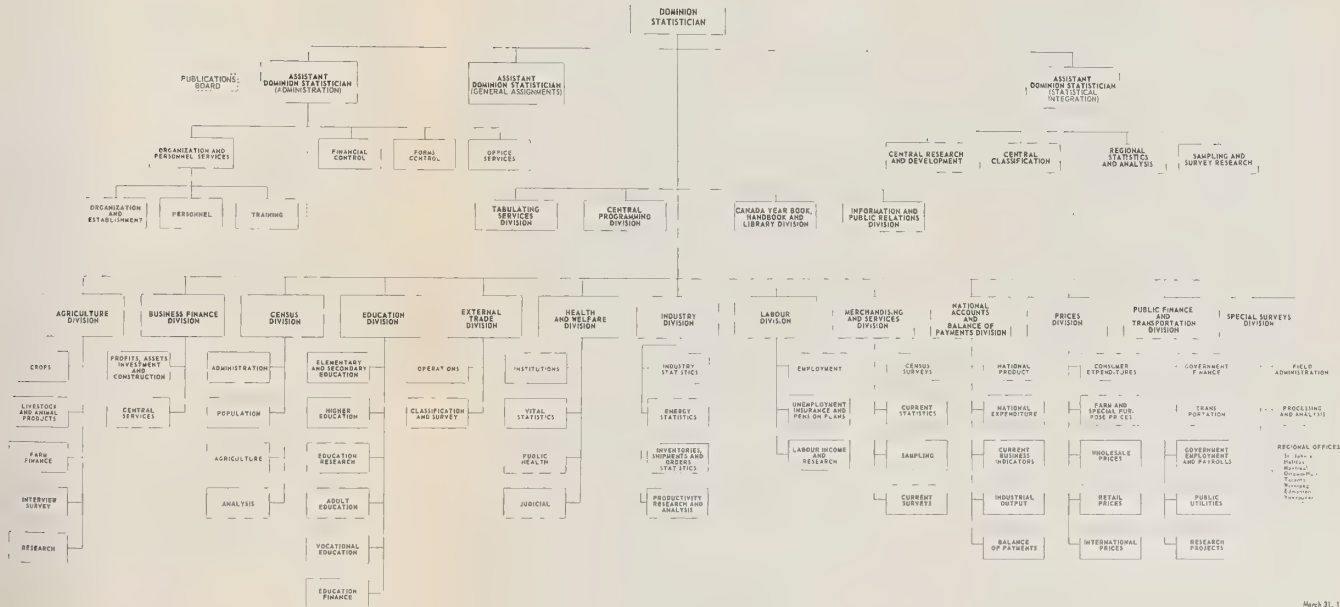
Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel and Organization and Establishment Section. In carrying out these functions it is necessary to maintain close liaison with the Civil Service Commission on recruitment, pay, promotions, transfer and related matters.

The staff employed on continuing operations at March 31, 1965 numbered 2,057, an increase of 87 from the number employed on March 31, 1964. During the year, 63 statisticians and economists were recruited and 28 were separated. There were 32 research assistants engaged on summer projects. Throughout the year 273 promotional competitions were conducted. The 1961 Census temporary staff at Head Office, which numbered 218 on March 31, 1964, was reduced to 107 by March 31, 1965.

The establishment authorized for the fiscal year was 2,167 positions and 103.12 man-years of casual clerical assistance for continuing operations, and 149 man-years for 1961 Census processing.

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION



DOMINION BUREAU OF STATISTICS

CHART SHOWING ORGANIZATION

March 31, 1965

Staff training and development continued with the DBS Training Officer acting mainly as an adviser to line management on employee development and related activities, and on technical training at the divisional level. He is also responsible for directing supervisory and management development programs and participates in management consultation activities, as well as employee relations, counselling and guidance activities.

The Health Unit, a branch of the Civil Service Health Division of the Department of National Health and Welfare, continued to provide an industrial nursing service for employees.

Suggestion Awards

During the fiscal year, 31 suggestions from DBS employees were considered by the Suggestion Award Committee; two were adopted and awards made; a third has been adopted and the employee suggesting it will be receiving an award when the savings have been estimated.

Financial Control Section

This section consists of two units, one concerned with the control of funds, audit and processing of accounts, co-ordination of the estimates and internal accounting. The second section is concerned with the sale and distribution of Dominion Bureau of Statistics publications.

During the past year, in addition to its other functions, the Accounts Unit assumed full responsibility for the audit of travel accounts.

The Publications Distribution Unit completed the conversion of mailing lists required by the adoption of the *Standard Industrial Classification Manual* by the Census of Industry. Packages of publications mailed during the year numbered 1,200,000. The subscription mailing list now contains 164,000 address-graph plates.

Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications, which resulted in savings of both time and material. In addition, comprehensive analytical studies of procedure, forms, collection of data and processing were carried out in five sections of the Bureau, resulting in some reorganization and general improvement in the monthly employment survey, the corporation financial statements, coal statistics, the External Trade Division filing system and the uniform crime reporting program.

During the year under review, the Forms Control Section processed 3,460 forms consisting of 10,430 pages of reprints, revisions and new or redesigned forms. In addition, 450 specialty forms and envelopes were prepared and 2,065 other miscellaneous printing jobs processed.

Office Services

During the year, a Typing and Transcribing Services Section was set up with a centralized control system, based on the results of a Civil Service Commission survey conducted the previous year. In addition to the then existing

main Typing Unit, a reallocation of typing and transcribing personnel was effected which resulted in three additional typing units being established, one on each floor of the building to service a predetermined number of subject-matter divisions. It is expected that overall efficiency, improved quality of copy and increased production will result from more effective management, standardization of dictating equipment and the overall use in the units of electric typewriters.

The new Printing Liaison Services Unit, in addition to maintaining liaison with the Vari-type and Printing Sections of the Canadian Government Printing Bureau situated at DBS, is responsible for examining manuscript of DBS publications being submitted for composition and advising on layout, format, standards, stock and binding of publications as well as co-ordinating work-flow and assigning printing priorities. Records of printing progress of the publications are kept from the original requisition through proofreading, meeting deadlines to the finished product. During the 1964-65 fiscal year, this Unit processed and prepared for printing 12,175 pages of copy.

The Office Services Section prepared various layout studies of the DBS building and other space required in order to accommodate staff increases.

The Drafting Unit prepared 2,254 economic charts, maps, diagrams and various illustrations for the divisions of the Bureau and other departments and agencies of the Government, an increase of 12.5% over the previous year. In addition, the Unit completed a series of 37 charts for the Royal Commission on Health Services.

During the period under review, 448,050 prints were completed in the Contact and Xerox Duplicating Unit.

The outgoing mail numbered 23,195 bags; this included, in addition to the regular first and second class mail, 9,169 pieces of registered mail, 17,899 pieces of air mail; 886 pieces of special delivery mail and 4,145 parcels posted.

In the Addressograph Unit 13,917,663 forms were addressed for the various divisions of the Bureau. In addition, 244,474 plates were embossed, 158,891 corrected and 187,187 deleted.

The Supplies Unit submitted 628 printing and stationery requisitions to the Department of Defence Production, for a value of \$475,036. The supplies inventory as at March 31, 1965 was \$30,105; the annual stock turnover rate, therefore, was 15.8. Value of DBS office machine and equipment inventory, based on original cost, was \$675,951.

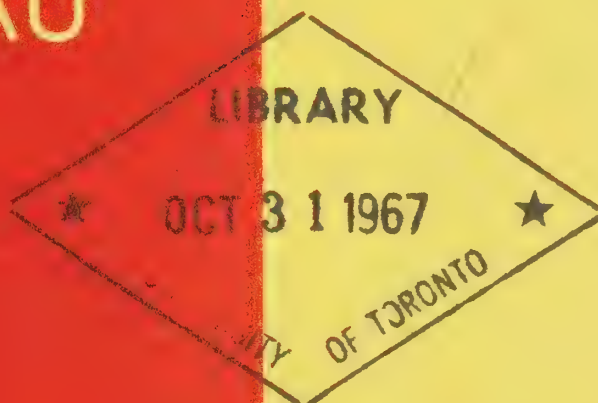


ANNUAL REPORT



Canada

DOMINION BUREAU
OF
STATISTICS



For the Fiscal Year ended March 31, 1966

*Annual
Report*

CATALOGUE No.

11-201



CANADA

ANNUAL REPORT

OF THE

DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1966

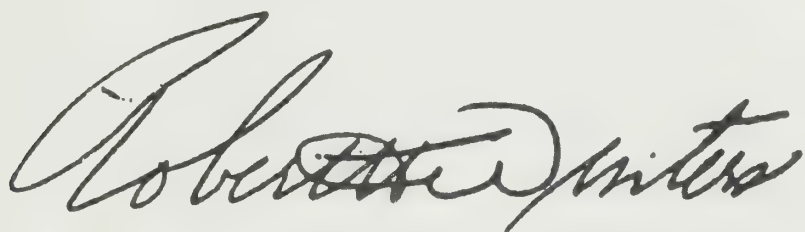
June 1966
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Price: 40 cents

*To His Excellency General Georges P. Vanier, D.S.O., M.C., C.D.,
Governor General and Commander-in-Chief of Canada.*

The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1966.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Robert D. Mitchell". The signature is fluid and cursive, with the first name "Robert" being more prominent and the last name "Mitchell" following in a similar style.

Minister of Trade and Commerce,

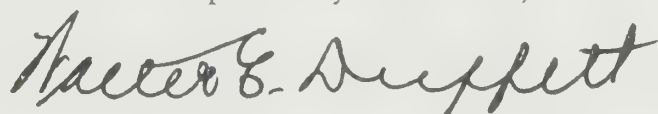
Ottawa, Canada
June 1966.

THE HONOURABLE ROBERT H. WINTERS
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1966.

Respectfully submitted,

A handwritten signature in dark ink, reading "Hector G. Duffett". The signature is written in a cursive style with a large, prominent 'H' and a long, sweeping underline.

Dominion Statistician.

Ottawa, Canada
June 1966.

GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's activities in the Dominion Bureau of Statistics as well as certain operations closely associated with the office of the Dominion Statistician. Subsequent sections deal with the work of subject-matter and service divisions.

The year under review saw a continuation of the growth in demand for statistical services which was a feature of the preceding three years. New federal government agencies such as ARDA, the Area Development Agency, the Special Planning Secretariat in the Privy Council, and the Economic Council of Canada have continued to press for more data, including both broad national aggregative figures and information on regions and sub-provincial areas. Royal Commissions and other investigating bodies have sought and obtained much detailed information, particularly in the form of breakdowns of 1961 census material. Statistical requirements of provincial governments continue to grow and much attention was devoted to their needs by special tabulations and by joint arrangements for collection of statistics from business firms. The newly-established Regional Statistics and Analysis Staff was active in maintaining provincial liaison.

Among other measures taken to meet these growing demands was an increase in the number of positions on the establishment, which increased by 193 positions during the year. Recruitment of professional staff, which is increasingly important in the newer and more sophisticated types of project, continues to be difficult. It seems that the supply of economists and statisticians from Canadian universities is well below the current and prospective need for such persons throughout the economy. Some recruits are being obtained from abroad, but the number of suitable candidates is not very large.

The growth in the staff over several years, the increased efforts needed in recruitment and a significant delegation to DBS of functions formerly the responsibility of the Civil Service Commission and Treasury Board, have all placed an additional burden on the relatively small personnel and administrative staff of the agency. These tendencies seem likely to increase further and some of the increase in staff resources has been used to strengthen the administrative structure of the organization.

The addition of personnel is of course by no means the only method by which increased statistical output can be secured. Increased efficiency through the use of computers, sophisticated mathematical techniques and improved clerical procedures represents a promising avenue of attack which is being increasingly exploited. The existing computer equipment is gradually being freed from the task of tabulating the 1961 Census, which has occupied much of its capacity, and existing DBS survey operations are being computerized with savings in staff and improved quality and detail. The computer resources continued to be used virtually at capacity – 24 hours a day during a 5-day week, with considerable overtime at week-ends. A systematic study is under way to establish long-run computer requirements in DBS as the basis for plans to replace some of the existing equipment which is becoming obsolete. Apart from better tabulation methods, a good deal can be achieved

by the general redesign of some existing surveys. The monthly survey of the labour force, the most expensive single survey in the DBS program (apart from the Census) was redesigned during the year in order to provide, at some reduction in cost, a degree of detail and accuracy which would have cost about double the amount with the previous survey design. Opportunities of this magnitude are exceptional but similar work is proceeding on a variety of other surveys.

Increased attention was directed during the year to the use of administrative statistics as a relatively economical method of obtaining information about persons. Provincial authorities, especially in the field of education, are also interested in these possibilities.

Planning and organization, which commenced three years ago, for the small-scale Census of Population, Agriculture and Merchandising to be conducted in June 1966, are now complete. This Census will be carried out in all of Canada but on a less comprehensive basis than the Decennial Census of 1961. The decision to convert the Census of Merchandising and Service Trades from a decennial to a quinquennial census is of major importance to measurement in this large and growing range of activities. In addition to providing more up-to-date information, it will improve the results of current samples by providing a new benchmark and a new sampling frame every five years instead of every ten.

An organizational change of particular interest is the modification of the traditional practice of physical centralization of statistics, by the creation of a DBS "satellite" unit of some 50 positions within the Department of Transport to deal with air transport statistics. It is believed that physical proximity to the Department will ensure effective support to its work, while supervision by DBS will promote statistical efficiency and consistency.

The Corporations and Labour Unions Returns Act Administration, which is formally separate from DBS but in practice an integral part of the organization, is not covered in this report because it is the subject of a special comprehensive report, the first of which appeared during 1965. However, it is to be noted that during the year the CALURA administration continued to become more effectively integrated into the national statistical system and is preparing to assume responsibility for the corporation portion of *Taxation Statistics* formerly published by the Department of National Revenue.

It will be evident from this report that 1965-1966 was a year of unusually heavy pressure on the staff of DBS, and in this situation the skill, loyalty and devotion of the staff have been of vital importance.

CENTRAL STAFFS

Under this heading the activities of the following staffs are summarised: Central Classifications; Central Research and Development; Regional Statistics and Analysis; and Sampling and Survey Research.

Central Classifications Staff

Development of the Central DBS List of Companies and Establishments has continued. The Central List numbering system has now been extended to financial statistics, the motor transport survey, communications statistics surveys, pensions statistics surveys and the monthly shipments and inventories survey. Investigation of cases of inconsistency in the handling of companies and establishments on DBS surveys was transferred to the Central List staff early in 1965. During the year the number of outstanding "problem cases" was reduced significantly.

An operational manual has been drafted outlining the procedures followed in setting up and maintaining the Central List and its relationship to DBS survey lists. It is expected that the manual will enhance the usefulness of the Central List by increasing the Bureau's understanding of its operations and assisting in staff training.

The co-operative arrangement continues with the Unemployment Insurance Commission whereby UIC local offices collect a Nature of Business Report from all new registrants. This has proven to be the major source of information necessary to keep DBS survey lists up-to-date and is the basis of the semi-annual publication *New Manufacturing Establishments in Canada*.

Division 9 of the Standard Industrial Classification (Finance, Insurance and Real Estate) has been expanded from 5 classes to 29 classes during the year, reflecting the increased demand for more detailed financial statistics. The new classes will be implemented in financial surveys immediately, and then reviewed in the light of experience.

During the past year preliminary steps have been taken to effect the integration of establishment and company statistics. As a first step towards integrated data, the Central Classifications Staff has co-operated with the Business Finance Division on investigations of the interrelationships of companies and their respective establishments. It is expected that this project will be completed about the middle of 1966. The staff has also initiated a program which has for its goal the tabulation of employment and related data on a company and establishment basis. This is a pilot project in the area of integrated statistics and will serve as a guide when other series in the Bureau are investigated.

A Standard Geographical Classification, derived from the 1961 Census and providing code numbers for provinces, counties or census divisions, rural and urban municipalities, and greater cities and census metropolitan areas, has been adopted as the standard for areal statistics produced by DBS. An interim edition of the Standard Geographical Classification, complete with maps and a supplement with codes for foreign countries, has been issued and a final edition is expected shortly. It is planned that the Central List Staff will assist in the implementation of the Standard Geographical Classification. As a preliminary step in this direction members of the staff have worked with the Industry Division in the examination and revision of geographical codes assigned to all Census of Manufactures returns for the years 1961, 1962 and 1963. Currently, standard geographical codes are being assigned to all new businesses.

The implementation of the Standard Commodity Classification is continuing, notably for manufacturing and transportation statistics. The first draft of an expanded version of the Standard Commodity Classification for coding materials and supplies used, as well as commodities shipped by manufacturing establishments, was circulated during the year. A second draft is now in preparation. The first edition of a convertibility computer tape linking the United States Standard Transportation Commodity Code, the Canadian Standard Commodity Classification and a list of freight items to be reported by Canadian railways, has been developed in co-operation with the CNR and CPR and is now under revision. It is expected that 1966 railway freight statistics will be available on both the new and old bases. Some work was also done during the year on a Standard Classification of Services to supplement the Standard Commodity Classification. Such a classification will facilitate collecting and assembling data on total production of and expenditures for goods and services, including service inputs and outputs of different industries.

The increasingly important field of Occupational Classification has received considerable attention during the year. The Director of the Central Classifications Staff was seconded to the International Labour Office in Geneva for six months to engage in a revision of the International Standard Classification of Occupations. In co-operation with the Department of Manpower and Immigration a project is now under way to develop a Canadian Standard Classification and Dictionary of Occupations. This is a major undertaking and will result in a classification suitable for statistical surveys including the Census; manpower analysis; operational programs such as employment placement, vocational training and immigration; and wage analysis. It is planned that the classification structure will be available for use in the 1971 Population Census.

Central Research and Development Staff

An econometrics group was established during the year as part of the Central Research and Development Staff. The functions of this group are to carry out research requiring the application of econometric methods to problems associated with the production or analysis of statistics and to provide a consultative service to other divisions of the Bureau. During the year under review, projects were undertaken or consultation services provided in the areas of retail price statistics, productivity statistics, labour statistics, industrial output statistics, retail trade statistics, national accounts, the annual census of manufacturing, vital statistics, demographic analysis and projections, and hospital statistics, all in close co-operation with personnel of the divisions concerned. Work was also carried out in connection with a continuing program of research on methods of seasonal adjustment. In co-operation with the Central Programming Staff, considerable effort was devoted to the further development and application of computer techniques to replace various "work-sheet" calculations hitherto carried out on desk calculators in various parts of the Bureau. One member of the group participated on a part-time basis in the research program of the Economic Council of Canada.

A broader set of input-output tables is now under construction for 1961 following extensive modifications of the original plans during 1965. The modifications, occasioned by recent theoretical developments, have laid the foundation of an expanded and more versatile input-output program. During the past year continuing attention was given to furthering commodity flow studies with particular emphasis on the assembly of commodity balance data. Work in this area will be continuing at an accelerated pace during the coming year. Similarly, progress continued to be made in the studies to determine the use of services by goods-producing industries and the appropriate investment income applicable to these industries. The above has required the reconciliation and co-ordination of various company and establishment statistics with the aim of continually improving the quality of DBS data. Special attention has been given to studies of the construction, transportation and service industries. The construction study provided data on own account and contract construction by industry. The transportation study is continuing to yield estimates of the total transportation services involved in moving aggregated groups of commodities by different means of transportation. The service study examined selected service industries to determine their commodity inputs. Further work will be undertaken in these areas during the coming year.

Discussions were held with various branches of the federal Department of Industry to provide them with information on the uses of input-output tables and to discuss how the detail in the 1961 table could be rearranged to facilitate their requirements. Staff members of the Department of Industry have agreed to provide to the input-output staff technical knowledge that will be useful in completing the 1961 tables.

Substantial work was carried out during the year on the content and design of the financial flow accounts. Decisions have been made on the detail of sectors and categories to be published. During the year assistance was given to other DBS divisions in the planning and development of surveys covering quarterly financial statistics. Arrangements were also made with the Bank of Canada, the Central Mortgage and Housing Corporation and other government departments for DBS to receive financial information obtained by them in the course of administrative procedures or special surveys. A workshop on financial statistics which concentrated on operational problems was set up during the year and selected problems on concepts, methods and sources were discussed during a seminar which was held at regular intervals.

The annual reports submitted by the Business Finance Division, the Governments and Transportation Division and the National Accounts and Balance of Payments Division should be read to complete the picture of developments in the area of financial statistics. These Divisions provide most of the basic material used in the financial flow accounts.

A report has been completed on the results of the 1964 Survey of Consumer Finances which collected data on consumer assets and liabilities, as well as income, and which included a special questionnaire on stock ownership. Preliminary income data from this survey were released in the fall of 1965, and the main report entitled *Incomes, Assets and Indebtedness of Non-Farm Families in Canada, 1963* will be released in the spring of 1966.

Another survey to collect income data for 1965 was carried out in March-April 1966. This survey was a subsample of the labour force survey and the first income survey to consist of a sample of all households, including farm households. All previous income survey statistics were restricted to non-farm families and individuals. If the data collected from farm households are satisfactory, income estimates will be published for all families in future. Some information is also being collected on the characteristics of unincorporated businesses.

A great deal of work has been carried out on the development of income statistics from the income data collected on the 1951, 1954, 1957, 1959 and 1961 income surveys adjusted for changes in prices. Consideration is being given to the publication of a special historical report on income changes in the family income distribution between 1951 and either 1961 or 1965.

The two remaining census reports on income, for Volume IV of the 1961 Census publications, were released in 1965. In addition, the "Introduction to Volume IV" and the review article on incomes for Volume VII were completed and will be published in mid-1966. This will complete the publication of the main census volume reports on income. Two special reports – one on income by census tracts and one on earnings by occupations for each province – were also published in 1965. A number of other special reports containing census income statistics on topics such as earnings by industry, family income statistics on an economic family basis, and family income by size of family by county have been completed and will be released in the spring and summer of 1966. Publication of all reports containing census income data will be completed by the end of the summer of 1966.

Work has proceeded on a monograph on personal income, seven chapters of which have been completed as well as some sections of the appendix. Two of the chapters on earnings and returns to education were released in a DBS report. Another chapter was presented as a paper at the Canadian Conference on Aging in a study prepared jointly with the Labour Division on *The Economic Status of the Aging*. Some of the material from a chapter on low income families was distributed as a paper at the Federal-Provincial Conference on Poverty in December 1965. Thus a considerable portion of the monograph material completed in 1966 was made available for public use through these papers. It is hoped to complete the monograph in 1966. Some limited work was done on the problems of the quality of census data and census concepts on personal income, and it is hoped to have all the projects dealing with these topics under way by the summer of 1966 and completed within a year. A substantial amount of consultative assistance was given to agencies and organizations such as the Special Planning Secretariat, the Canadian Welfare Council and the Area Development Agency of the Department of Industry. Preliminary planning of a long-run program of income and related statistics has been started and in the coming year the details of the program will be developed.

A project was commenced designed to improve the projection of trends in the fertility component of population change, and work is in progress on a computer program for population projections. Work on a census monograph on

internal migration has continued. A census report on population fertility and one on population mobility has been published. A paper has been prepared on *Population Trends in Canada* and one on *Internal Migration and the Family Cycle*.

Regional Statistics and Analysis Staff

During the year, a considerable amount of time was spent on matters relating to staff recruitment and organisation as well as a substantial amount of consulting, liaison and facilitating services carried out. Most of the provincial capitals were visited for informal discussions with provincial government statisticians and economists concerning their present and potential statistical requirements. In co-operation with other DBS divisions, a substantial amount of time was devoted to the organization and implementation of a pilot labour force survey in Quebec, at the request of the Quebec Bureau of Statistics. Assistance was provided in connection with an ARDA-sponsored, socio-economic study in the Gaspé region. Consultation services and information on *ad hoc* problems were provided to officials from various provincial government departments and several federal government departments. Detailed statistical studies were prepared, on request, for a number of towns and counties. Work was commenced on a bibliography of information relating to regional statistics and work is in progress on a location-specific catalogue of statistics and a county-city handbook, in collaboration with other DBS divisions. Staff members participated in the work of a number of interdepartmental committees dealing with regional and small area statistics and various subcommittees of the Federal-Provincial Conference on Economic Statistics.

Sampling and Survey Research Staff

In order to facilitate effective liaison with subject-matter divisions, some adjustments were made during the year in the organisation of the staff. Three separate survey methods groups have been established, each headed by a co-ordinator. Each of these groups has certain designated subject-matter divisions as its area of activity. The function of each is to provide regular consulting services and, where necessary, make recommendations to the Director concerned on ways to improve the efficiency of the programs conducted by his division. This function involves: the investigation of up-to-date methods and techniques and their application to the programs carried out by the division, such as maintenance and quality control of survey frames, lists and maps; the design of sampling procedures where applicable; methods of data collection; processing (*e.g.* editing, imputations and quality control); estimation and evaluation of reliability (sampling and response errors); research concerning the contribution of the different phases of the programs to the overall cost on the one hand and the overall reliability on the other hand; and the promotion of the exchange of survey experience and methods between the divisions concerned. In addition to these subject-matter oriented activities, the Sampling and Survey Research Staff will continue to carry out staff activities not immediately related to subject-matter statistical work.

The redesign of the Labour Force Survey, an operation carried out jointly with the Special Surveys Division, has been finished. The new sample design is now in force throughout Canada. A complete description of the

methods used in the redesign was published under the title *Methodology of the Canadian Labour Force Survey*. The sampling variability of some 30 characteristics are calculated and issued every month, along with the sampling variability of estimated differences. A computer program was written by the Central Programming Staff based on specifications prepared by the Sampling and Survey Research Staff to calculate the components of sampling variability which can be ascribed to different stages of sampling. Work is well under way on a system of comprehensive controls designed to signal the deterioration of the sample if and where it occurs. The system will include a framework for more detailed analysis of enumerators' performance and field costs. The programming work is almost finished on an alternative method of estimation which would utilize the previous month's information in addition to the current information and thus reduce the sampling variability of the estimates without increasing the sample size. The issuing of a series of quarterly tables, based on the results of a re-enumeration survey conducted by supervisors, has begun. The purpose of these tables is to shed light on the response errors in the Labour Force Survey.

Work is on schedule on a program to analyse the coverage and content errors of the 1966 Censuses of Population and Agriculture. This program consists of three projects. The first of these will provide national and regional estimates of under-enumeration in the Census for rural, urban and metropolitan areas and for some age-sex groups. It is based on a sample of persons selected from 1961 Census records, supplemented by a sample of persons selected from other lists, e.g. a list of immigrants and birth records in the period 1961-66. The project consists of locating the current address of each person in the sample (approximately 25,000 persons) and then searching the 1966 Census records to ascertain if these persons were enumerated in the 1966 Census. The second project consists of matching approximately half of the households enumerated in the May 1966 Labour Force Survey with the 1966 Census records. This project is designed to provide estimates of under- and over-enumeration of households in the Census, as well as estimates of content error. The third project is a quality check of the Census of Agriculture. It is based on the enumeration of a sample of area segments, and farms within these segments, by specially trained enumerators using special detailed questionnaires and the comparison of the results of this enumeration with the results of the Census of Agriculture.

In collaboration with the Census Division and the Special Surveys Division work has begun on the planning of test censuses in the years between 1966 and 1971 with the purpose of experimenting with alternative methods of enumeration to be used in the 1971 Census.

In co-operation with the Labour and Central Programming Divisions, work has continued on the monthly employment survey. This survey is well on the way to becoming a completely computerized operation. The preparation of the estimates from the completed returns, the various procedures which update the sampling frame, the selection and control of the rotation of the sample, the printing of address labels and the control of the mailing operation will all be handled by computers.

In collaboration with the Governments and Transportation Division, the sample selection procedures for the Motor Transport Traffic Survey are being revised. In one province the new method is now operational and takes advantage of the fact that vehicle registrations are available on magnetic tapes in that province. The new procedures will be implemented in a number of other provinces which are in the process of transferring their registration records to tape.

One of the important processing operations during the 1966 Census will be the transfer of enumeration schedules to tape. This operation will be automatic and will be handled by a document reader. A quality control plan was devised for the operation of the document reader to reduce the number of errors attributable to the machine during the processing of the 1966 Census documents.

Data collected on goods brought into Canada by tourists have, up till now, been collected and processed on a 100% basis. In co-operation with the External Trade Division a sample design was prepared with the purpose of selecting a sample of tourist exemption forms and reduce thereby the processing load associated with the tourist exemptions survey.

Work is under way on the development of a general analysis and sample selection computer program which will perform most of the calculations and analyses which statisticians usually perform prior to a decision on the nature of the sample design. The program is designed to be used for the more routine types of sampling consultation problems.

Consultation services were provided on a large number of smaller problems and projects involving most of the divisions of the Bureau, as well as several other federal and provincial government departments. Extensive consultation service was provided the Quebec Bureau of Statistics in the planning and conduct of a pilot labour force survey. Another major consulting activity was carried out for the Government of Trinidad and Tobago involving the design of a continuing survey of business establishments in those Islands. Consulting services were provided for provincial authorities in Prince Edward Island and Nova Scotia in respect of surveys of tourism in those provinces.

AGRICULTURE DIVISION

The Agriculture Division is responsible for the development and co-ordination of an integrated program of agricultural statistics, including the collection, compilation and publication of current statistical data relating to all phases of the agricultural industry. Although much of the data related to the program is collected by a number of other divisions of the Dominion Bureau of Statistics, by provincial governments and the Canada Department of Agriculture, the Agriculture Division assembles such data for statistical analyses and publication.

The specific role of the Division in the collection of statistics is to conduct farm sample surveys (annual, monthly or seasonal) from which are derived forecasts and estimates of the acreage and production of field, fruit

and vegetable crops, number and production of the various kinds of livestock and poultry, as well as farm prices and wage rates. It also conducts full-coverage surveys at the manufacturing or wholesale level for production and stocks of a number of agricultural products and co-operates directly with the provinces and other agencies in the conduct of certain farm and industry surveys.

The publication program includes timely commodity reports on production, stocks and prices of farm products, farm receipts and expenditures, value and volume of farm production, farm wage rates, and indexes of farm prices.

A federal Interdepartmental Committee, with commodity subcommittees, and an annual Federal-Provincial Conference on Agricultural Statistics facilitate the co-ordination of the statistical program. The Federal-Provincial Conference held in February, 1966 was devoted primarily to a review of the crop reporting program, including new uses for data and new methods of collection and processing.

The general program for field and horticulture crop reporting is well established in Canada but, because of the rapidly changing farm structure, sampling and reporting methods must be continually up-dated. The increasing size and specialization of on-farm production units places a heavy burden on the long-established mail questionnaire sampling techniques. Whereas a general purpose sample was adequate to generate estimates for most field crops when the bulk of the farms were relatively homogeneous with respect to production patterns, the modern trend makes it essential that different sampling methods be developed for many individual commodities.

To meet some of these needs, an intensive program to increase the size of the crop correspondent sample in Quebec and Ontario has been carried out over the past three seasons. The goals with respect to size and distribution of the sample have now been largely attained. Special sampling frames have been developed in co-operation with provincial departments for some commodities such as potatoes in Quebec and Alberta, and winter wheat and dry beans in Ontario. An experimental program to test the feasibility of generating yield estimates for winter wheat by actual counts of wheat plants in sample plots was started in Kent County of Ontario in 1965. A study of fertilizer use by regions in the Prairie Provinces and forecasts of intentions to use fertilizer was undertaken in 1965. Research was undertaken concerning the feasibility of changing some field crops from a seeded to a harvested area basis. Considerable work was carried out to organize the statistics pertaining to Canadian edible oilseeds. These are now being published regularly in the *Coarse Grains Quarterly*.

A number of projects to improve the accuracy and timeliness of the statistics pertaining to fruit and vegetable crops were carried forward or instituted in 1965. During the summer of 1965, the second year of counts of sour cherries and processing peaches on sample selected trees and branches in the Niagara District of Ontario was completed. Tentative estimates of the number of mature fruit on the trees prior to harvest were prepared and the results published. Arrangements were made to increase the sample size in

1966 and to have the results of these surveys incorporated into the regular crop estimating program. Preliminary studies on developing a sample count estimating program for grapes were carried out and limited field testing will be initiated in 1966.

A new survey of processors was introduced to obtain data on harvested acreages and tonnages processed for the principal canning crops. This program was carried out in November and the service should provide a valuable starting point for earlier vegetable crop estimates in the future. A mail questionnaire survey of the mushroom industry was initiated in 1965; the greenhouse and nursery stock questionnaires were revised and the mailing lists reviewed with the co-operation of the industry at their request. An early honey crop estimate based on a survey of large beekeepers was carried out and the results released in August.

The regular operating program of the Livestock Section included the monthly reports on the output of dairy factory products, fluid milk sales, estimates of production and farm value of milk and eggs, and on stocks of the principal food commodities held in storage; quarterly reports on the number of pigs on farms and sows to farrow forecasts; semi-annual estimates of other livestock and poultry on farms, annual estimates of meat and wool production and disappearance. Annual reports on dairy, livestock, poultry and eggs, and also on fur farm statistics, cover production, trade, consumption, and other related data relevant to these areas of activity. In this connection it may be mentioned that work on the *Handbook of Livestock Statistics* has reached the final stages and should be completed early in 1966.

A more detailed analysis on the results of the questions dealing with cattle on feed was made. These questions dealt with inventory numbers and marketing intentions and were first added to the semi-annual livestock survey at June 1, 1964. Results look promising, but no estimates can be made until the 1966 Census of Agriculture provides a benchmark. It is hoped to make this a survey of its own in the near future, resources permitting.

More research was done on improving the estimates of fluid milk sales and, beginning with January 1965, data published in the monthly publication *Fluid Milk Sales* was restricted to commercial sales of milk and cream only. Detail volume sales for specified markets and for nine provinces of Canada, not including Newfoundland, are now published for the different kinds of milk and cream, as well as fluid by-products.

Several meetings were held between officials of the Dominion Bureau of Statistics and the Statistical Committee of the Canadian Food Processors Association during 1965. As a result of these meetings, a new monthly survey of manufacturers or processors of frozen vegetables will be initiated in 1966 which will cover cold storage holdings of frozen vegetables intended for remanufacture (not to be confused with inventories held for repackaging). In response to strong demand by industry, a small pilot survey was undertaken to determine the content of the category "Other Vegetables" as reported in cold storage statistics. There is the possibility that the more important items in this category may be separated out in the future.

The year 1965 also saw the introduction of a balance sheet approach as a check on the monthly estimates of laying hens. Previously this was only done at the end of each year. Efforts are continuing to have complete coverage of the large enterprises for broilers, layers, turkeys, geese and ducks.

The Farm Finance Section conducted its regular semi-annual farm surveys of crop acreages, livestock numbers and disposition, farm woodlot production and farm wages. Additional surveys covered monthly farm prices and seasonal farm wage rates. Estimates were prepared and published for: indexes of farm prices and production; farm cash receipts and net income from farming operations; farm wage rates; farm capital; and the value of total agricultural production. During the year, the large-scale revisions of the estimates of the farm income and expenses were continued, and it is expected they will be completed and published during the spring months.

Arrangements were completed whereby eight of the larger farm machinery companies have agreed to supply the Bureau each year with information concerning the amount of credit they extend to farmers for the purchase of farm machinery and the amount outstanding at the end of each year. This covers only credit extended by the companies themselves and does not include the credit provided by dealers on their own account.

Plans were made to include on the 1966 Census quality check questionnaire some questions concerning off-farm income received by farm operators and their family members. The sample to be used consists of about 4,000 farms and will provide data on a national and regional basis. This will provide the first opportunity to assess the contribution of off-farm income to total income of farmers since 1958.

A major research report, under the title *Distribution of Resources, Income and Expenditures in the Agricultural Sector*, was prepared with direct assistance from the Economics Branch, Canada Department of Agriculture. This report provides data which indicate the income from farm and non-farm activities for geographic regions and economic classes of agricultural holdings. It also includes data on the level and distribution of income from farm and off-farm sources for the main product types of farms. Differences in farm operating expenses and resource combinations associated with product types and economic classes of farm holdings are described for geographic regions. Data on the age and education of farm operators are provided for economic classes of farm holdings within geographic regions. Throughout the report, interpretation and analysis of the data is undertaken to assist policy-makers, farm organizations and others in assessing income problems in the agricultural sector and the structural framework within which these problems occur.

Another report released was titled *Motor Vehicles and Power Machinery on Farms: Numbers, Values and Operating Expenses*. It consists mainly of detailed statistical tables, accompanied by the essential descriptive and explanatory material in the text. This report is intended to serve as a handbook or reference for users of statistical data, and contains only a minimum of data analysis and interpretation. In general, the tables provide the aggregates and the numbers of farms reporting for the numbers, values,

operation and operating expenses for farm machinery and equipment, along with other selected items which are relevant for analysis and interpretation of the use and operation of machinery on farms.

The 1958 Farm Income and Expenditure Survey continues to provide data which is not available from other sources in the form and detail desired for research purposes. During the past year, several statistical tables were compiled from the files of computer tabulations in response to requests for information from universities, research institutes and farm organizations.

Plans are being made to produce a new set of farm mailing lists using information obtained from questionnaires completed in the 1966 Census of Agriculture. Basic to this project is the master tape file required for computer processing of the farm mailing lists. Data specified for storage on the master tape file consist of codes for identification of the farm, name and mailing address of the farm operator, crop acreages, livestock and poultry numbers, and other selected characteristics of the farm. In addition to production of the farm mailing lists, the master tape file will be available for the preparation of lists and classifications of farms for special surveys, and for research projects related to sampling and survey methods.

The feasibility of a new system for addressing survey schedules is under investigation. In applying this system, addresses are printed by the computer on continuous fan-fold paper and are then transferred by a heat process to the survey schedules. Consequently, the production, storage and maintenance of over 400,000 addressograph plates could be eliminated.

BUSINESS FINANCE DIVISION

The main function of the Business Finance Division is the collection and analysis of data and the publication of reports on profits, assets and liabilities, capital expenditures, research and development expenditures, cheques cashed, commercial failures, construction, housing and building permits. The Division also participates in the development of special studies on the flow of funds between sectors of the economy and on estimates of the stock of fixed capital held by various sectors. In addition, special tabulations and analyses of the various types of data collected are prepared for royal commissions, federal and provincial departments and agencies and business groups.

Quarterly data on assets, liabilities, net worth or equity and statements of revenue and expenditure are collected from a stratified sample of approximately five thousand corporations in both the financial and non-financial sectors of the economy. Since 1951 data on profits, taxes, sales and capital cost allowance have been published quarterly for approximately twenty-five broad industrial groups. In 1961 the collection of quarterly balance sheet data was started and information is now published for trust companies, mortgage companies, sales finance companies, consumer loan companies, mutual funds and closed-end funds. Development work is continuing on major industrial groups of the non-financial sector. Up to the present these two

series have been published separately but as the data are now collected by one survey, it is planned to publish a combined report which will show the balance sheet, statement of revenue and expenses, and sources and uses of funds for approximately forty major industrial groupings.

In order to obtain some preliminary indication of probable investment trends during the coming year as well as expenditures for the past year, estimates of capital and repair expenditures on construction and machinery and equipment are obtained from business, institutions and governments. In addition, estimates of the expenditures of individuals for housing are also included. Two reports summarizing the results of the surveys are published: the main report *Private and Public Investment Outlook* is released in March, and *Private and Public Investment Mid-Year Review* is released in July of each year.

During the year, there was a very substantial increase in the demand for more regional and industry detail for historical as well as current series. This, in turn, required expanded coverage, quality improvement and clarification, and review of some of the concepts and definitions in use. Although not all demands could be met, considerable progress was made in some areas. A start was made on examining the feasibility of expanding the coverage of the mid-year survey to enable the preparation of provincial estimates of capital expenditures at mid-year. Attention was also given to the possibility of changes in the timing of the capital expenditures surveys and to longer-range forecasts, as well as to the linking of the results of these surveys with changes in the fixed assets account items of the balance sheet data reported in the quarterly financial statements surveys. Consultations were held with the oil and gas industry and with the oil and gas well-drilling contractors in an effort to clarify the definitions used in DBS surveys in these areas. A study is underway in co-operation with industry, the federal and provincial Departments of Mines and the Industry Division of DBS to improve survey procedures for the remainder of the mining sector. The coverage for logging and municipal water utilities was reassessed during the year and improvements in estimates made. Work is continuing on preparing estimates of capital and repair expenditures in manufacturing by economic region in each province.

The results of the profits and investment surveys provide the basic data for corresponding items in the National Accounts and are widely used by business and government as key indicators of current and future developments in the economy.

In addition to the construction data provided in the investment reports which show expenditures on construction as reported by organizations paying for the work done, another report, entitled *Construction in Canada*, based on both the capital expenditures survey and a survey of the construction industry, provides information on value of work put in place by type of structure along with overall estimates of the labour and material content of this work. This report provides separate estimates for value of work performed by construction contractors and that performed by others engaged in construction work on their own account as well as an estimate of the trend of man-hours worked

in the construction industry. The monthly report *Building Permits* provides data on the number and value of housing units by type, and the value of industrial, commercial, institutional and government building construction from more than 1,400 municipalities in Canada. In addition, the Division publishes a monthly report containing the results of a nation-wide survey conducted by the Central Mortgage and Housing Corporation as well as information obtained on building permits. Work directed towards improving the methods of estimating residential capital formation was continued during the year under review.

Two reports on Canadian scientific research and development are published biennially by the Division: one on federal government research and the other on research and development in Canadian industry. In this connection, the Division has continued to assist other government agencies interested in this field, especially the National Research Council, the Department of Industry, the Science Secretariat and the Economic Council of Canada, which have, in turn, been of considerable help to the Division. Questionnaires for an experimental survey of the scientific activities of Canadian non-profit organizations in 1965 were designed during the past year and, if the results of the survey are satisfactory, they should be available for release in 1966-67.

Since 1963 the Division has worked with the Directorate for Scientific Affairs of the Organization for Economic Co-operation and Development in its efforts to standardize the definitions of statistics on research and development. In 1965-66 this involved participation in the OECD's "International Statistical Year for Research and Development" and included the preparation of estimates for total Canadian research and development expenditures in 1963. Recommendations for the revisions of the OECD manual now used for research and development surveys were made and will be discussed further at the forthcoming meeting in Paris in April 1966.

A federal-provincial seminar on capital stocks and flows was held during the year. A reference document dealing with methodology on capital stocks and flows in the Canadian manufacturing industries is expected to be released in 1966. This will be accompanied by a statistical supplement showing estimates of fixed capital flows and stocks in Canadian manufacturing for the period 1926 to 1960. Work is presently continuing in the estimation of capital stocks in the agricultural and housing sectors. Plans are also being considered for estimating capital stock in other sectors of the economy.

Reports on commercial failures in Canada are issued quarterly and are based on material supplied to the Bureau under the provisions of the Bankruptcy and Winding Up Acts. The number of failures and the amount of liabilities are published by region and by industry. In addition, reports are issued monthly and annually on the total value of cheques cashed in fifty-one clearing centres in Canada from material supplied by the Canadian Bankers' Association.

CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION

The program of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official compendia of information on the Canadian economy, the *Canada Year Book* and the handbook *Canada*, and the revision of material relative to Canada for a score of national and international yearbooks. In addition, a suitably stocked library with appropriate services for statistical research and study is maintained.

The compiling, editing and printing of the *Canada Year Book 1966* extended throughout the fiscal year and it was anticipated that an initial supply of copies of the English language edition would be ready by mid-year 1966. At the close of the fiscal year, production of the French language counterpart, *Annuaire du Canada 1966*, had reached the half-way mark.

Early in November the official handbook, *Canada 1965-66*, was published simultaneously in English and French in quantities totalling over 157,000 copies.

In lieu of a standard official handbook *Canada* for 1967, a specially planned, enlarged and profusely illustrated centennial volume of about 500 pages was well underway by the close of the fiscal year. Designed to commemorate Canada's Centennial of Confederation and entitled *Canada, One Hundred, 1867-1967 (Canada, Un siècle, 1867-1967)*, it will highlight in textual, illustrative and tabular presentation significant developments in the nation's growth – geographic, political, demographic, economic, social and cultural. Publication of separate English and French editions totalling hundreds of thousands of copies is scheduled for March or April 1967.

As a focal centre for Canadian statistical material closely related to the overall authoritative coverage by the *Canada Year Book* of Canadian government and the economy, the Division supplied regular series of Canadian statistics for the United Nations Statistical Monthly Bulletin, the United Nations Statistical Yearbook and for the International Labour Office. In addition, the long-established practice of providing up-to-date annual revisions of Canadian material to many standard national and international reference works was continued, as was the dispensing of current and historical data in response to numerous multi-subject inquiries concerning Canadian affairs received by the Bureau.

CENSUS DIVISION

The main activities of the Census Division were centred around final preparations for the five-year census of population, agriculture and merchandising to be conducted in June 1966. The 1966 Census will be on a scale similar to the 1956 Census and will be much more restricted in scope than the statutory decennial census conducted in 1961.

Questionnaires and administrative forms were prepared, along with manuals for the training of staffs both in the field and in the processing offices. Computer edit programs and other pretabulation processing operations were developed and tested in conjunction with the Central Programming Staff. Final plans were completed for computer tabulations and for the publication of results of the Census. Plans were developed for the use of computer "print-outs" as direct photocopy for published tables and this method will be used in the production of a number of the population and agriculture reports.

Maps were prepared for each of the 36,000 Enumeration Areas and 1,450 Census Districts. Revisions to the maps were completed following a field check by regional office personnel. Enumeration supplies were packed for each of the enumeration areas as well as for each of the Census Districts and Regional Offices. Plans were completed with the other government departments concerned with the enumeration of persons located in the northern areas of Canada and of persons living on Indian Reserves and in military establishments. Preparations were made for an advance mailing of agriculture questionnaires to all farmers in Canada.

Sixteen reports of the 1961 Census were released during the year, including reports on economic characteristics and income of the population and reports relating to fertility and migration. In addition, the preparation of analytical reports for the General Review volume was continued and six reports were released during the year. Work on the production of the 1961 Census monographs continued and a number of analytical tables for the monograph writing were produced. Other specialized materials of the 1961 Census were made available to users in the form of special tabulations and computer summary tapes. The demands by users for 1961 Census information were very much heavier than at corresponding periods in previous decades, the most notable of these being increased requirements on the part of other government departments and boards, royal commissions, area development agencies, provincial statistical bureaux, municipal planning boards, marketing and other research consultants.

Changes in the Old Age Security Pension regulations resulted in a substantial increase in the number of requests for verification of age from early census and national registration records. Some 50,000 requests were received and processed during the year. The Proofreading Unit, in addition to reading all manuscripts before publication, reviewed all manuscripts for consistency of the English and French text prior to printing.

Plans for reorganizing and strengthening the Division were developed further and additional appointments were made in the Research Sections of the Census Division. These sections pursued the development of long-term research programs in the three areas of: Demographic Analysis and Research, Methods Research and Development, and the Population Estimations and Projections. In particular, early in 1966 the responsibility for population projections was assigned to the Census Division and developmental work on related topics was immediately begun. A number of studies in all three research areas have been formulated and commenced.

In collaboration with the Sampling and Survey Research Staff, plans have been drawn and preparatory work advanced for several methodological studies mainly in connection with the 1966 Census. In particular, the following studies have been started: the time study of the 1966 field enumeration; the production of addresses through electronic computers for one medium-sized town; a test of the adequacy of the 1966 Census postal check; and a study of the adequacy of some aspects of the editing and other processing procedures used in the 1966 Census. A number of Technical Memoranda and Census Technical Papers in the general area of Demographic Analysis and Research were produced.

The regular series of quarterly population estimates and annual reports were prepared for publication. The annual report on the *Estimates of Families in Canada* were prepared and published during the year. The annual report on *Canadian Citizenship Statistics* was also published as well as a special review of Canadian Statistics on Citizenship covering the 1959-64 period. A report entitled *Selected Statistics on Children* was prepared for the 1965 Conference on Children.

Representatives of the Division served on various DBS and interdepartmental committees and acted as consultants to other government departments and to international organizations. Two members of the Division attended the World Population Conference in Belgrade at which two papers were presented. In addition, a program for training a number of students from other countries on international fellowships was held during the year.

EDUCATION DIVISION

As a result of the increasing use of computers and of the growing emphasis on education and economic planning, major changes are taking place in the realm of education statistics. The computer makes possible the establishment, storing, and up-dating of individual records of large numbers of schools, teachers and pupils. As a result, the processes of tabulation, have been speeded up giving ready access to particular records and facilitating studies over a period of time hitherto only possible with small numbers, with great effort and at considerable expense.

The growing emphasis on education planning is creating a demand for greater detail which depicts movement and change particularly in relation to students. These include data on numbers of beginners to the education stream or to a particular level or source, movement from one grade or year to the next, or from one course to another, and numbers of dropouts and graduates.

Educational planning also requires the collection of data on schools, teachers and finance hitherto not available. A natural result of the concern with planning is the demand not only for short-term estimates which can be based largely on known quantities, but also for long-term projections which must, of necessity, be based much more on assumptions. This demand is coming from economic councils, federal and provincial departments and

agencies and private companies. Under present circumstances these demands can hardly be met. School boards and various education institutions across the country are establishing data banks of records particularly on pupils so that there is a pressing need to establish coded lists of basic items if any degree of uniformity and comparability is to be maintained within provinces and among the provinces. Some of the provinces are already moving towards the establishment of provincial records.

In view of these developments and the needs of the provincial departments of education, the Ministers of Education have appointed a Ministers' Information Services Committee consisting of representatives from each province as an interprovincial organization whose objectives are to advise, to communicate about, and to co-ordinate activities in the field of education data processing in Canada. Officers of the Education Division are working closely with this Committee as they attempt to consider and organize the whole range of data to be collected, the uses to be made of the derived statistics, and the practical problems of collecting the data and establishing the records in each province.

In co-operation with the Departments concerned, individual pupil record forms for collecting data on pupils withdrawing from school were instituted for Nova Scotia, Indian Affairs and Northern Development in an effort to improve information on this subject. It is anticipated that New Brunswick will adopt this method next school year. The annual survey of private kindergartens and nursery schools, which was begun two years ago in five provinces, was extended this year to include all provinces except Quebec. There are some seven hundred of these schools. In the fall of 1965 the information required on high school pupils in public schools was extended to include numbers completing secondary school. Also additional information was asked of high school teachers to discover their academic preparation in relation to the subjects they teach.

In the Vocational Training Section, a Survey of Training in Industry first undertaken in the spring of 1963 was repeated in the fall of 1965 in co-operation with the Economics and Research Branch of the Department of Citizenship and Immigration, the purpose being to determine the extent to which industrial firms are providing organized training programs and some tangible incentive to employees to advance their training or education. In addition, two special projects were undertaken: one was a survey of part-time enrolments and of the salaries and qualifications of staff in institutes of technology; the other was a survey of private trade schools and business colleges to gather data for an up-to-date directory of these schools. These three studies were in addition to the regular work of the section which includes the collection, processing and tabulation of statistics on eight technical and vocational training programs, six of which are monthly reports, as well as the collection, processing and tabulation of data on enrolments and staff in private trade schools and business colleges.

In the field of higher education, two reports on university salaries, one on salary scales and one on actual salaries, at about fifty institutions were again prepared for the 1965-66 academic year for the Canadian Association of University Teachers (CAUT) and the Canadian Association of University

Business Officers (CAUBO), both of which were subsequently reprinted in *The CAUT Bulletin*. Numerous requests for data on university tuition charges resulted in the issuing of a compilation on *Tuition and Living Accommodation Costs at Canadian Degree-granting Universities and Colleges, 1965-66*. This proved popular and will become a regular annual publication.

Several weeks were spent in a consulting role with the Royal Commission on Financing Higher Education and with the Association of Universities and Colleges in Canada (AUCC) in the summer and fall, prior to the release of the report of the Commission (the Bladen Report) in October. Subsequent federal implementation of certain of the recommendations (such as the creation of some form of a federal secretariat of higher education and a system of weighted enrolment counts for federal operating grants to universities), begun or announced early in 1966, are already increasing the complexity of statistical and technical demands on the section from the various federal departments concerned with higher education and from the AUCC and the other higher education organizations.

The Section also undertook to prepare data on salaries and qualifications of university teachers of nursing for the Canadian Nurses Association. Planning is presently underway for a DBS conference on higher education enrolment and graduation statistics to be held in June 1966. The AUCC have requested the Section to publish again *Awards for Graduate Study and Research*, which in recent years has been published by another organization, but the present staff situation prevents this. In addition, a chapter on "Education" was prepared for the 1965 *Canadian Annual Review* as well as the Canadian chapter on higher education for Volume IV of UNESCO's *World Survey of Education*, issued early in 1966. In the Adult Education and Libraries Section of the Division, the annual *Survey of Libraries, Part I and Part II*, the annual *Survey of Adult Education* and a report on *Museums and Art Galleries* were published in addition to several small preliminary releases issued to compensate for the time lag in the publication of regular reports and for distribution at conferences. These included *Adult Education in Canada, 1963-64*; *Circulation and Payments of Public Libraries, 1964*; *Directory of Museums and Art Galleries, 1964*; and *Median Salaries of Library School Graduates*. Material was also provided for a brief summary of Library Resources in Canada to be issued by the Information Division.

Two papers were prepared for conferences on adult education, one entitled *Population with Limited Education, Census 1961* and the second entitled *Measuring the Need for Basic Adult Education* based on extensive published and unpublished census data assembled with the assistance of the Census Division.

During the year the Research Section completed and published a report on *Student Progress through the Schools, by Age and Grade, 1965*. In addition a report on *Canadian Education through Correspondence* is now being prepared for the printer, a preliminary version of which was issued for an international conference on correspondence education held in Sweden in June 1965. A comprehensive survey of the educational provisions for exceptional children has been undertaken and is now nearing the end of the data-collection stage.

The objective is to provide an accurate statistical description of the educational effort being made on behalf of gifted, retarded, crippled and otherwise handicapped children by public and private authorities, and to show certain characteristics of their teachers.

In co-operation with the Canadian School Trustees' Association, a survey of the membership of school boards in Canada is being made; the design of questionnaires is well advanced and preparations are being made for the drawing of the sample.

A fifth project, the *Statistical Review of Education, Census 1961* has been delayed awaiting the arrival of certain census tabulations. A sixth project, *Census and Other Data for Vocational Counsellors*, is now in the final stages of preparation.

A major project of the Finance Section, the preparation of an *Accounting Manual for School Boards*, was completed and is being printed. This, when put into use by the provinces, should give considerable impetus to uniform accounting by school boards across the country. Improvements in the data collected were made by a more extensive and intensive survey of expenditures on education by federal departments and agencies beginning with 1963-64 figures, and by collecting financial statistics from the smaller colleges which hitherto were not included in the annual survey. Though individually small, *in toto* they account for twenty per cent of the enrolment in higher education. Preparations are underway for a federal-provincial conference on financing higher education in June 1966.

A revision of the *Organization and Administration of Public Schools in Canada* has been in progress during the year. Each chapter in draft form was submitted to and discussed with officials of the provincial Departments of Education concerned so that the publication will be as up-to-date and authoritative as possible. In co-operation with the Information Division an information and advertising program was developed which has materially increased sales of education publications. In all, twenty publications were released by the Education Division during the year and at the end of the fiscal year an additional seven were in process of printing.

EXTERNAL TRADE DIVISION

The External Trade Division is responsible for planning the content of Canada's commodity trade statistics, and for the analytical and clerical work required to produce these statistics. Available publications and records, as well as planned publications for which the basic analytical and clerical work has been completed, provide statistics on exports and imports by commodity, by country, by province of customs clearance, and by whether goods moved via Canadian or United States ports; on exports by mode of transport and by province of lading for export; and on imports by tariff item.

Tariff item statistics are the latest addition to the Division's output. Compilation of these statistics commenced in September 1965, the first full month that the new tariff item numbering system was in effect. Compilation plans provide for monthly statistics on almost every item of the Customs

Tariff, with details of the value and duty collected or assessed on imports from each country. In its initial stages this project has encountered an unusual concentration of administrative and computer programming problems, and it is unlikely that monthly statistics will be available regularly before the latter part of 1966. It is hoped that extensive cross-classifications of tariff items and commodity classes will eventually be possible, but each unit of information released on this basis must first be checked for consistency with the secrecy provisions of the Statistics Act.

During the year preparations were completed for the publication of the Division's principal monthly reports in a bilingual format. This new format will be introduced with reports for January 1966. Another change in the format of these reports will be to present values in terms of thousands of dollars. This presentation was tested in the preliminary annual import report for the year 1964, and was found to be acceptable to most users of import statistics. It is considered to have the additional advantage of being more consistent with the actual accuracy of statistical tables than the former last-dollar presentation.

The work of the Division continued in 1965-66 under the handicaps of inadequate professional and managerial resources, and limited clerical facilities. In consequence, it was not possible to deal with certain desirable studies and improvements in the data and procedures. As a result of these and other problems, there was some deterioration in the timeliness of certain reports.

GOVERNMENTS AND TRANSPORTATION DIVISION

The function of this Division is to collect and publish data on the financial structure of all levels of government in Canada with particular details on numbers employed and payrolls, the performance and financial condition of rail, road, water, air, pipeline and other forms of transport, and public utilities.

In addition to responsibility for the publication of statistics in the field of government employment and payrolls, the Division is charged with the preparation of employment and payroll data for special use by the Civil Service Commission, Treasury Board and other central agencies of the federal government. A survey of benefit usage in the Public Service of Canada is being undertaken to provide Treasury Board with data for use in connection with staff management policy decisions. Considerable progress was made towards the establishment of a Central Personnel Record System for the Public Service of Canada intended to provide central agencies of federal government with data for the purpose of making pay and staff management decisions and also to provide departments with data for their use in staff management activities. The additional details provided by this system will also be used in producing more extensive statistical analyses. Special tabulations were prepared in extensive detail for the use of the Royal Commission on Bilingualism and Biculturalism. A sample survey of employment

and payrolls in small urban and rural municipalities was developed. Plans are currently being made to develop an extended analysis of information for municipalities with populations in excess of 50,000.

In addition to the regular statistical program in the field of government finance a great deal of time was devoted to the work of the Dominion-Provincial Tax Structure Committee. Seven volumes of data were prepared for discussion and examination by the Committee and discussions were held with provincial treasury officials in all provincial capitals across Canada. *Historical Review – Financial Statistics of Governments in Canada – 1950-62* was distributed by the Minister of Finance to the other members of the Tax Structure Committee and was later released as a DBS publication. The document includes a detailed description of the conceptual framework, classification systems and basic sources of information used by the Dominion Bureau of Statistics throughout the government finance statistics program. This work was indicative of the sharply increased interest expressed by federal and provincial government officials in government finance statistics. In an effort to improve the quality of the program, a series of discussions were held with provincial and municipal government treasury officials. Consultations were also held with the Canadian Council on Urban and Regional Research, the Institute of Local Government of Queen's University, the Canadian Tax Foundation and other organizations, with particular emphasis on the shortcomings in the field of municipal government finance statistics. A conference on this subject will be held at Queen's University in May, 1966 at which DBS will be one of the joint sponsors.

Work continued with the Expenditure Coding Committee of the Government of Canada in connection with the development of an accounts classification which will identify expenditures by program, by activity and by economic object, using to the extent applicable DBS classification systems. When implemented these recommendations will materially improve both the financial management and the National Accounts analyses of government expenditures. Preliminary discussions have been carried on with officials of the provinces of British Columbia, Saskatchewan, Alberta, Ontario, Quebec and Newfoundland, with a view to the adoption of similar account classifications.

Considerable developmental work has been carried out in extending the flow of funds exercise to federal government enterprises, provincial and municipal governments and also provincial government enterprises. In co-operation with the Department of Finance, the flow of funds statements of the federal government for the fiscal year ending March 31, 1965, have been analysed on a "sectored" basis to determine the source and use of funds by the federal government in each sector of the economy. Arrangements have been made with provincial governments to commence reporting quarterly balance sheet information as well as revenue and expenditure transactions, starting with the third quarter of 1965. A quarterly reporting form for federal and provincial government enterprises and municipalities has been developed to be introduced with the quarter ending March 31, 1966.

Statistics dealing with government indebtedness have been improved with the introduction of a monthly reporting system of provincial and municipal debt transactions commencing in January 1966.

In the public utilities field, preliminary discussions have taken place with officers of the Board of Broadcast Governors and the Department of Transport with reference to the collection of statistical information from radio and television broadcasting stations. With the assistance of the National Advisory Committee on Broadcasting Statistics the reporting schedules were considerably revised.

In the field of transportation statistics, an extensive review was made of the work procedures connected with the Motor Transport Traffic Survey.

Extensive work was also done on the implementation of the Standard Commodity Classification and its use by railways in reporting commodity data. Conversion of rail freight traffic statistics from the commodity classification system used in the United States is being accomplished through a computerized conversion program. The DBS Advisory Committee on Rail Transport Statistics appointed a subcommittee to review all aspects of statistics in the field of rail transport.

A number of extensive tabulations were produced at the request of the National Harbours Board, the Economic Policy and Research Branch of the Department of Transport and the Atlantic Provinces Transportation study.

On April 1, 1966, Treasury Board authorized the establishment of a new Section of the Governments and Transportation Division of DBS as a satellite operation within the Department of Transport. The Section, officially designated as the "Aviation Statistics Centre", was created to meet the requirements of the Department of Transport, Air Transport Board and other agencies of the government for aviation statistics representing a new approach to the provision of statistics within government.

HEALTH AND WELFARE DIVISION

This Division is responsible for the production of statistics on the state of health of the Canadian people, on the enforcement of law and on the administration of justice in Canada. Three sections share the responsibility for producing statistics on health. The Vital Statistics Section is concerned with recording births, deaths, marriages and divorces. In particular, it carries out studies on natality, mortality, fertility and life expectancy. The Institutions Section is concerned with the services, facilities, staffing and finances of general and special hospitals, and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in hospitals of every treatment type. It is also concerned with the incidence of a number of communicable diseases. The fourth section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments, courts, correctional institutions, the Penitentiary Service and the National Parole Board.

The Division carried out its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports, and by providing the provinces with basic tabulations of births, stillbirths, marriages

and deaths, as required under Dominion-Provincial Agreements. Throughout the year, demands for information continued from public health officials, education authorities, individuals engaged in medical research, manufacturing and distributing firms, market research agencies and other government departments, as well as the public at large. Many of these demands represent requests for detailed analyses of current and historical records. More frequent this year than ever before have been requests for intensive investigations of the patterns of nuptiality and fertility as a result of the recent drastic changes in the birth and the marriage rates. New developments in hospital and medical care have added to the already considerable flow of demands for information on mortality due to particular causes. Most of these varied requests required special calculations and compilations as the information demanded was not available in any published form.

To meet a number of demands, as well as satisfying special interest groups, several analytical studies have been published or are planned. These studies relate to cancer, accidents, heart disease, foetal and infant mortality, nuptiality, fertility, and life expectancy and deal with the latest trends in these areas as well as seek to elucidate factors associated with the direction and magnitude of the trends. Besides the planned special life expectancy study, a series of annual life tables is being initiated to serve as a general reference for those interested in survivorship and for government and other bodies responsible for long-term projections and planning.

Since 1945, the Division has been preparing, on behalf of the provinces and the Family Allowances Administration, alphabetic registers of births, marriages and deaths. As this task is not directly statistical in nature, the Bureau would be agreeable to transfer this work to some other body; negotiations to this end and investigations into suitable alternative methods of supplying the listings are continuing.

Processing of vital records in the Bureau is an expensive and lengthy process. Economies have already been realized by making arrangements with the five largest provinces to share with them the cost of producing basic statistical records by standardizing statistical procedures. Further economies and even more complete co-operation with provincial authorities should be possible when the vital statistics output begins to flow from a specially written electronic computer program. In the meantime, in order to advance publication dates and to meet pressing demands for new statistics, the existence of a general purpose program has been used and a large number of routine calculations carried out automatically by electronic equipment.

Each year the Division provides the Vital Statistics Council for Canada with its secretariat service and is usually involved in the examination of a number of problems designated by the Council, some of which relate to legal and administrative features of the vital statistics system while others extend to the general sphere of social statistics. One problem which resulted in a great many meetings was the investigation and redesigning of the registration forms used by the provinces. The objective of this investigation was to standardize the content, size and format of the schedules used by all the provinces, except where local legal requirements make some variation inevi-

table. The schedules, of course, serve both legal and statistical purposes so that provision has to be made for meeting both requirements. The anticipated benefits will be both administrative and statistical and will include cost economies, a new convenience in processing, a new ease of record exchange, saving of space in storing the forms and other advantages for the provincial administrators. At the same time the statistical usefulness of the schedules will also have been thoroughly reviewed.

By characterizing the operating and financial activities of hospitals of all types, the Division produces a wide range of statistics. The range includes measurements of the facilities, services, supply of personnel, training programs, and the finances of general and special hospitals, as well as of mental institutions and tuberculosis sanatoria. As it takes considerable time after the close of the calendar year for the hospitals to complete their accounting work and submit returns to the Division for processing and publishing the data, it became necessary to issue a preliminary hospital statistics report. The figures in this report, which are estimates drawn from the total hospital universe, were published within ten months of the close of the calendar year and it is hoped to improve the timeliness of this report in subsequent years. In the meantime, the complete program of hospital statistic production has been accelerated as much as possible. As a result the full range of 1963 statistics were all published two months in advance of the previous year's date. Further improvement is anticipated in the next fiscal year.

During the year, the staff of the Institutions Section worked very closely with officers of the Quebec Hospital Insurance Service to develop an integrated approach toward editing the comprehensive hospital returns. The results of these endeavours have exceeded expectations. Not only have the edited figures become available more quickly than before but the quantity of acceptable input has increased in size.

During the year an econometric analysis of hospital statistics was begun by the Division, in co-operation with the Research and Econometric Staff in the Bureau. At the close of the year, the Division obtained the services of an experienced specialist in operations research who will continue the original study, and will investigate other applications of mathematical techniques to data based on operating and financial activities of hospitals.

As in the past, the Division published information on the medical conditions, and social and other characteristics, of patients confined to hospitals of all types. In particular, a second report on morbidity in general and allied special hospitals was prepared covering 1961 and shows detailed diagnostic information for about 900 categories of the International Classification of Diseases for nine provinces, subdivided into age and sex groups with rates shown for these population groupings. Previously information of similar detail and completeness, together with rates, had not been available for identifiable populations of this size. This work represents a significant addition to morbidity knowledge in Canada as for many diseases and many conditions, the hospital morbidity figures constitute the only available source

of information. Preparatory work done during this fiscal year should enable an additional three years' figures to be published during the next 12 months, thus bringing the reports on to a more current basis.

Besides the work on morbidity in general and special hospitals, the regular reports on mental and tuberculosis institutions were published during the year, together with a monthly report on the incidence of tuberculosis. An evaluation of the currently existing mental health statistics was carried out and as a result, a statistical program for the future was outlined.

There were several developments in the tuberculosis morbidity statistics area. Individual case reporting was commenced on persons being treated outside institutions. The Division was represented at the annual meeting of the Canadian Tuberculosis Association and at the Third National Conference on Tuberculosis where papers were presented by officers of the Division. In addition, visits were paid during the year to several provincial registers, as well as to a number of individual sanatoria in connection with the monthly tuberculosis incidence reports, which are derived from the provincial records of known active, inactive and reactivated cases of tuberculosis. Weekly bulletins on the incidence of communicable diseases were also released for the benefit of public health authorities and these weekly figures were later incorporated into an annual publication. Tabulations of certain venereal infections reported to the Division were forwarded to the Department of National Health and Welfare for inclusion in a special report.

There were many time-consuming special requests for information on morbidity from federal and provincial government departments and from individuals. In many cases the replies required special compilations and tabulations drawn from the mental health, tuberculosis, hospital morbidity and communicable disease statistics systems maintained by the Division and ranged from material for a national conference on the aged as well as for a national conference on children, to information on the distribution of hospital beds in a province or data on particular diseases.

During the year, the Division published information on crime and traffic enforcement statistics, on police administration, on criminal and other offences tried in courts, on correctional institutions, and on juvenile delinquency. It also supplied the Commissioner of Penitentiaries and the National Parole Service with statistical tables for inclusion in reports issued by these agencies. As well, for the first time, the Division released a report on murder statistics which covered the years 1961 to 1964.

In addition to the regular publications that were released during the year, a number of others in the police, juvenile and adult courts area as well as on training schools were prepared for publication. As a result, it is expected that the currency of publications in these fields will be much improved in the forthcoming year.

Work toward the improvement in quality and currency of statistics in the areas of law enforcement and the administration of justice has continued. Monthly reporting has been introduced into the collection of juvenile and

adult court figures. As well, permission to collect adult and juvenile probation schedules, and adult correctional institution records, on a monthly basis, has been received. Besides these substantial changes other reporting developments have taken place. One of these is a respondent review program designed to improve statistics in the court area. A joint working group consisting of officers of the Canadian Penitentiary Service, Department of Justice, and the Division was formed and their recommendations, if accepted, will advance the usefulness of the penitentiary statistics program.

Reporting by police correspondents is done according to a uniform crime reporting manual which was reissued this year in a revised form. In addition, the Royal Canadian Mounted Police discontinued their own reporting system and adopted the uniform one which resulted in doubling the number of basic reports to the Division and the processing of a man-hours study on a monthly basis on behalf of the RCMP.

The Division keeps records of penitentiary movements and of penitentiary inmates. To facilitate the preparation of inmate statistics, a penitentiary census deck was set up, verified, and tabulated for the first time. A problem in balancing figures received from various institutions has been resolved and it will only be necessary from now on to maintain the deck in an up-to-date condition by indexing all the changes as they occur.

Another development which took place during the year was the revision of the annual report on correctional institutions statistics with the addition of the standard capacity of the institutions. Further work was carried out on murder, arson and bank robbery statistical projects. Highway traffic statistics were reviewed during the year, and copies of an American manual were sent to police correspondents to use for experimental purposes.

INDUSTRY DIVISION

A major part of the work of the Industry Division is centred around statistical surveys of establishments in the industry and energy fields. Forestry, manufacturing and mining are surveyed annually for a considerable amount of data; and monthly, quarterly or seasonally for current information on the production of important commodities and materials. With the exception of current commodity and employment statistics, fishing is surveyed quinquennially on an establishment basis. Energy surveys, likewise, are conducted on both an annual and current basis. The surveys in the two fields are carried out in connection with the Division's responsibility for a co-ordinated program of industry and energy statistics. Other important responsibilities include the development of productivity measures for the economy as a whole and for individual industries, and the collection and compilation of stock figures for the broad range of commodities considered to be critical in the event of a national crisis.

The prompt release of accurate statistical information on the subject-matter areas for which it is responsible is the primary objective of the publication program. Of perhaps most significance was the headway made in

advancing the processing schedule which should, in the year to follow, result in a further substantial improvement in the timeliness of the Division's publications. However, the release of the general manufacturing reports may be delayed for lack of computer time because of processing the 1966 Census of Canada records.

The Division's work is organized along subject-matter lines into four main sections – Industry Statistics, Productivity Research and Analysis, Energy Statistics, and Shipments, Inventories and Orders. Additionally, there are several other units including the Emergency Supply Planning Unit and the Analysis and Development Staff.

The past year was generally a period of consolidation for the Industry Statistics Section with relatively few major new developments taking place. Emphasis was again placed on improvement in the quality and timeliness of the various statistical series. However, the following developmental work is of interest: (1) new conceptual and operational procedures to obtain information with respect to research and development expenditures in mining by use of one questionnaire to meet the purposes of the provinces, the Business Finance Division and the Industry Division, and will eliminate three existing separate enquiries; (2) procedures to provide additional service to the provinces through accessibility to data filed as part of the censuses of manufacturing, forestry, mining and the co-ordination of processing principles and procedures; (3) increasing demand by the Department of Industry for special surveys, compilations and expansion of existing surveys. At the end of the fiscal year, the editing of 1964 data was 96% completed, this represents a gain in timeliness of about three months over the 1963 editing. In addition, one hundred and seven 1963 annual industry reports have been released as compared with sixty-five 1962 publications at the end of the last fiscal year. The 1965 editing is already in process and represents a gain of about four months over the 1964 annual censuses.

In the area of current statistics, the streamlining of processes and procedures has enabled the current operations unit to assume the responsibility for about fifty additional surveys and reports, which were formerly undertaken by subject-matter staff. As is the case for annual statistics, collection problems continued but improvements in vari-typing and printing operations reflected an improvement in timeliness.

In the subject-matter areas, the census of logging is now on an establishment basis and comparable data have been reworked back to 1961; the statistics for a number of industries including sawmills, planing mills, railroad rolling stock, printing and publishing have been reworked back to 1961 in keeping with changes in classification, revised concepts and procedures; the statistics for integrated mining, smelting and refining companies have been reworked back to 1961 on the new conceptual approach; the restructuring of the mining industries to reflect establishment statistics has been virtually completed and revised statistics linking 1961 to 1963 will be available early in the new year. The new survey of the primary fishing industry is in progress and the enumeration for the year 1965 is planned for completion by the end of June 1966. In addition to the foregoing, the in-

creasing impact of the Department of Industry's statistical requirements has resulted in two additional special surveys being undertaken, the planning for a third such survey and the preparation of a number of special tabulations. A special service bulletin covering food and beverage statistics has now been implemented and planning for similar bulletins in other subject-matter areas is underway.

In line with emphasizing liaison with principal suppliers and users of data, officers of the Section continued to emphasize personal contacts; in particular, trade associations were urged to develop continuing statistical committees, and meetings of such committees were held or are planned in all subject-matter areas. An interesting development in this regard was the formation of a continuing statistical subcommittee of the Provincial Mines Ministers' Conference, the secretariat of which is provided by the Section.

Active participation of section officers in the revision of the first draft of the Industrial Commodity Classification has resulted from the extensive comments and suggestions from industry and government agencies. Although there will be partial implementation of the suggestions in the 1966 questionnaires, it will not be possible, because of the volume of work, to complete the Classification nor to fully implement it in 1966 as was originally intended.

In the Productivity Research and Analysis Section, work continued, during the year under review, on the extension and refinement of measures of aggregate productivity performance for the Canadian economy. The industrial coverage of the reference paper *Indexes of Output per Person Employed and per Man-Hour, Commercial Nonagricultural Industries, Canada, 1947-63*, which had been released during the previous year, was broadened to include agriculture, and the component measures were updated to 1964 as well as being extended back to 1946. Thus the measures now cover the entire commercial economy. Because of the severe conceptual and statistical problems involved in the measurement of real output in the noncommercial sector of the economy, it is not expected that this coverage can be further extended in the foreseeable future. Efforts are, rather, being directed towards the provision of further industrial detail within the commercial economy. It is hoped that, as the next step in this direction, separate measures for the goods and service producing industries can be made available.

Progress was also made during the year in the program of productivity studies for individual manufacturing industries. A combined report for the Synthetic Textile Mills, Breweries and Pulp and Paper Mills will be published during 1966.

An Interdivisional Committee on Industry Real Output and Productivity Measures was formed for the purpose of guiding the development and co-ordination of the broad range of basic statistics underlying these two closely related programs. The Committee in co-operation with the Section has initiated a systematic review of existing surveys, programs and plans with DBS, as they affect real output and productivity measurement.

A new departure during the year was the application of matrix programs to the computational problems of the Section. This technique has so far been used only in the area of aggregate productivity measurement, but it is expected

ted to contribute significantly to the improvement of timeliness in all the Section's projects, present and proposed. The Section continued to maintain close contact with governmental and other users of productivity statistics to keep abreast of their evolving requirements. In addition, a paper on Canadian productivity measures was presented before the American Statistical Association in a joint session with colleagues of the United States Bureau of Labour Statistics.

The year's major activity in the Energy Statistics Section was the intensive development of coal statistics. A ten-year supply-demand table on this commodity was prepared and published. In addition, there were major improvements in methods and procedures, which resulted in simplified reporting of coal statistics and a sharply reduced number of respondents. Preliminary studies were undertaken towards developing the second stage of energy supply-demand tables. Annual supply-demand data are now available on all the major energy commodity series. The second stage of development will be the integration of these series into comprehensive energy supply-demand statistics including the utilization of energy and its impact on Canadian industry. Intensive development on this second stage will be undertaken in 1966-67. Timeliness of all publications continued to improve, and by the end of the year, virtually all compilation backlogs had been eliminated. A new current publication, entitled *Energy Statistics Service Bulletin*, was inaugurated to release to the public preliminary data and energy statistical notes.

In the Shipments, Inventories and Orders Section the annual revision to the monthly shipments, inventories and orders survey to the latest census base was carried out to the 1962 base. At the end of this year it is anticipated that, with the improvement in the timeliness of the census, the annual revision will be to a 1964 base; that is, although the year 1963 will be revised to 1963 annual values, the year 1964 and the estimates for 1965 and for the current year will be on a 1964 base. The revision is expected to be published in the April issue of the bulletin. The work on the revision of the economic use groupings and on the seasonally adjusted data for the industry group classes is continuing. The new monthly series on the printing and publishing industry from 1964 will be included in the next annual revision. Monthly reports from sawmills are being collected and the results will be incorporated into the series as soon as possible.

During the year, increased emphasis was placed on the collection of reports from firms in the survey and considerable improvement in collection was experienced. In addition, contact with Associations from the point of view of the monthly survey was well begun with two meetings with the electrical manufacturers. Work on extending the coverage of the survey in order to permit some major group breakdown by provincial groups is being pushed with a view to publishing some data at the beginning of 1967.

The Emergency Supply Planning Unit is responsible for the collection and assembly of data on stocks of critical survival materials for use of the Emergency Supply Planning Branch of the Department of Defence Production. During the past two years the emphasis has swung from food and clothing items to information required by the Department of National Health and

Welfare on drugs, pharmaceuticals, medical supplies, surgical instruments and machines. Data on coal and other energy products was also developed during the past year. Computer processing was extended to all the Unit's commodity series with consequent improvement in report design and clarity of detail.

During the year the Analysis and Development Staff was given increased responsibilities through the expansion of existing programs and the transfer to it of activities formerly performed in other parts of the Division. The staff is primarily responsible for the study and development of data presentation in the Industry Division's general publications on Canada, the provinces, and sub-provincial areas, the preparation of material for other publications such as the Canada Year Book and the Canada handbook, and the provision of consultative, developmental and informational services on a wide range of general industry statistics. These responsibilities involve the descriptive analysis of industry trends; the co-ordination of the statistical tables contained in the general reports with those in other division and Bureau reports; the development and analysis of comprehensive commodity statistics including the implementation and maintenance of the Industrial Commodity Classification (an adaptation of the Bureau's Standard Commodity Classification to Industry Division requirements); the development, in co-operation with other divisions, of various series of company statistics; through liaison with principal subscribers to the division's general publications and with major users of general statistics, the investigation of the desirability and feasibility of instituting new series, compilations and presentations of industry statistics; and the servicing of numerous complex requests relating to the division's statistics.

Although still labouring under the backlog of work arising from changes in classification, concepts and methods of processing of data, the staff accomplished some improvement in timeliness of release of its annual reports. By year-end, the *Advance Statement* of summary statistics of the manufacturing industries based on the 1963 Census of Manufactures had been released, and manuscript preparation for the 1963 Canada and provincial reports on manufacturing was well under way. During much of the year, however, a major part of the staff's efforts was directed to greatly expanded statistical analysis and to the introduction of a bilingual format in the Canada and five provincial or regional reports of the *Manufacturing Industries of Canada* series for 1962. In the provincial reports, historical tables on principal statistics on manufacturing activity, by industry group and industry, were published for the 1957-61 period on the basis of the revised Standard Industrial Classification and new establishment concept. Statistics for 1961 were republished in the 1962 reports on the basis of both manufacturing and total activity, introduced for the first time in the 1961 Census of Manufactures.

A preliminary draft of the *Industrial Commodity Classification Manual* was published and circulated to other government departments and agencies, industry associations and selected corporations. As a result, numerous meetings have been held with representatives of various groups to discuss their proposals for changes in the classification. These have been so extensive that full implementation of the Industrial Commodity Classification, originally planned for the 1966 Census of Manufactures, will not be possible until 1967 at the earliest. Pending the implementation of this classification,

consolidated data on commodity shipments will continue to be published in alphabetical sequence in the report *Products Shipped by Canadian Manufacturers*, formerly a part of the *General Review of the Manufacturing Industries* and published separately for the first time for the year 1961.

Throughout the Division, the program for computer processing continues to play a prominent role in planning and to exert a strong influence on actual operations. By year's end, practically all of the 1964 manufacturing returns were being processed through the system with 1965 returns to follow within a month's time. Computer processing of principal statistics for logging began in 1965 and steps were taken to implement other primary industries in 1966. The development of a computer program for the photo-reproduction of statistical tables was well advanced and considerable progress made in adapting to computer print-out, two reports of the *Manufacturing Industries of Canada* series: *Geographical Distribution* and *Type of Organization and Size of Establishment*. When completely developed and tested, this program should result in a substantial reduction in the time spent on the preparation of publications.

Extensive revisions were made during the year to the computer records for the Census of Manufactures for 1961, 1962 and 1963. These resulted from a determined effort to improve the data for those years and, at the same time, to provide a solid base for maintaining and improving the quality of manufacturing statistics in future censuses. A number of revisions were indicated during a thorough review of the geographic codes assigned to establishments. Other revisions arose through the analysis of the more extensive compilations now made by the computer while others resulted from the intensive edit to which manufacturing data has been subjected during, and following the recent changes in classification and concept in the Census of Manufactures. Based on the experience gained with the computer program for the three years, new and revised procedures are being instituted to ensure better detection of errors and inadequacies in the early stages of processing.

In developing the computer program, a determined effort is being made to provide for all foreseeable requests for information and special compilations. The number of requests is increasing yearly and 1965 was no exception. Of particular note was the accelerated demand for statistics at the subprovincial level from provincial governments, municipal planning boards, individual development agencies, market research organizations, trade associations, companies and individuals. The statistical needs of federal departments, especially the Department of Industry, the Economic Council of Canada as well as the provinces for economic planning has resulted in greater pressure for statistical services and for greater participation in industry surveys.

INFORMATION DIVISION

During the year the Division continued and improved its activities in the dissemination of information and in answering inquiries. Progress was also made on meeting the Division's other responsibilities and in reorganizing to deal with them on a more adequate basis. These other responsibilities

are mainly the improvement of relationships between the Bureau and respondents to DBS surveys and extension of the uses of DBS statistics. In addition, new functions of the Division include the development of the uses of statistics in areas where they are now used rarely or not at all; a consultative editing service for DBS statistical publications; and an increase in the publicity activities for the Bureau.

In statistics use development, a limited advertising schedule was undertaken directed mainly toward the management areas of business. This advertising indicated the kinds of statistical information available from the Dominion Bureau of Statistics and in general terms, the uses that can be made of it. It also contained references to a booklet intended for business people presently making little or no use of DBS information. As a result more than 12,000 copies of the booklet were issued in response to requests. Some editorial services work was also carried on during the year and improvements in the design of a number of publications were carried out. Publicity activities included exhibits and displays for meetings and conventions as well as promotional pamphlets for various purposes which were used at meetings of the Woodworking, Machinery and Supply Association; the Canadian Hospital Association; Conferences on Productivity through New Technology in Toronto and Montreal; meetings of the Canadian Electrical Manufacturers Association; the Ontario Food Processors Association as well as the Canadian Food Processors Association; the Canadian Library Association; the Canadian Museums Association and the Conference of Metallurgists. Along with other DBS officers, the Division was involved in a joint DBS-Institute of Association Executives conference intended to better acquaint associations with the work of the Dominion Bureau of Statistics and to encourage the uses of statistics through associations. During the year, a number of pamphlets were produced and distributed on such subjects as education statistics and food processing.

Many inquiries for statistical information are handled by the statistical divisions of the Bureau in addition to those processed in the Information Division. Recorded inquiries handled by the Information Division during the year totalled 1,967 by mail and 2,171 by telephone; in addition 715 visitors called at the office seeking statistical information. In many cases information for these inquiries had to be assembled from a variety of sources and included special tabulations in some instances. Most of these inquiries were from Canadian sources, but many were received from foreign countries as well.

On a number of occasions during the year information on DBS operations was assembled for reporters and editors, resulting in knowledge of the Bureau's activities being circulated to a wide audience. In addition, articles were prepared by the staff of the Division in co-operation with other DBS officers and subsequently published. The DBS Daily and Weekly Bulletins, which are essentially summaries of the DBS statistical output, continued publication with average press runs of 1,575 English and 325 French for the DBS Daily Bulletin and 1,950 for the DBS Weekly Bulletin. Subscribers to these bulletins are mostly users of statistics but include also many newspapers, magazines and other information media.

A second service bulletin for the field of energy statistics was established during the year under review, the first one on food and beverage industries having been introduced the previous year. This new service bulletin was well received within the industry and was circulated to 1,100 users of DBS statistics in this field. A third service bulletin for metal manufacturers is now being established.

The Division was heavily involved during the latter part of the year in publicity preparations for the 1966 Census of Canada, under the guidance of a Publicity Committee. An advertising campaign was prepared involving the use of daily newspapers, weekend and farm papers and radio. Work was also begun on a press kit, pamphlets, photographs on the subject of the Census, television slides and posters.

LABOUR DIVISION

The year 1965-66 was a particularly significant period for the Labour Division as a start was made in instituting a comprehensive program of research and analysis in labour statistics, revision programs were completed for major statistical series and several new statistical surveys were inaugurated.

The Research and Analysis Section is responsible for undertaking studies in the general field of labour statistics, using data produced in the Labour Division and in other Divisions of the Dominion Bureau of Statistics. In this respect, three senior university staff members were engaged for the summer of 1965 to carry out the following research projects: (a) a job content analysis of the Canadian economy (1941-61); (b) work experience of the adult population, 1960 and 1964; and (c) mobility patterns of professional engineers. In addition, the Assistant Director carried out a series of liaison meetings and talks with Canadian universities and attended conferences relating to this particular area of DBS responsibilities.

Special questions regarding educational attainment were added to the February 1965 monthly Labour Force Survey. Tabulation of these data in late summer provided the basis for a first draft analysis of the educational level of the native-born and post-war immigrant population and labour force. A background report on job vacancy surveys was prepared for presentation to the Working Committee on Labour Statistics in December and is now being utilized for further developmental work in co-operation with the Department of Manpower. A Census Monograph on the Canadian Labour Force is nearing completion.

A special study of the older worker was prepared for the Canadian Welfare Council and presented to the Conference on Aging in January 1966. A study on the labour force participation of women was prepared and presented to the Women's Bureau Conference, Department of Labour, in March 1966.

Tabulations from the special questions on geographic mobility added to the October 1965 Labour Force Survey are being analyzed and prepared for publication. Progress in carrying out the program of analytical and developmental research projects continued to be seriously hampered unfortunately by lack of qualified staff.

The Employment Section continued to collect and publish employment indexes, statistics of hours and earnings, and labour income as well as produce employment aggregates on an industry and geographic breakdown. A major program extending over a five-year period to revise the monthly employment, hours and earnings statistics to the 1960 Standard Industrial Classification and 1961 time base was completed during the year. This opens the way for publication of a document providing monthly and annual revised data for 1961-65 inclusive in mid-April 1966; at the same time the regular monthly statistics will be published on the revised basis, commencing with the January 1966 survey. Revised data for the period 1957-60 inclusive will be released later in 1966. The estimates of employee aggregates by industry and province have also been revised to the 1960 Standard Industrial Classification commencing with the January 1966 estimates. A significant improvement in the monthly computer and tabulation program for employment, hours and earnings was introduced with the January 1966 survey. It is expected that the substitution of a single computer program for two existing programs will result in substantial gain in timeliness in releasing the published data each month.

In co-operation with the Sampling Survey and Research Staff, plans have been developed for testing a program for automating the mailing and follow-up phase of the large firm monthly employment and payrolls survey using computer print-outs and high-speed addressing equipment. If tests prove the feasibility of this program, it may be adopted in other divisions of the Bureau. The development of a program to completely computerize the sample rotation, selection, mailing and tabulating of the small firm sample frame survey was well advanced during the year with work currently proceeding on transferring all the identities to computer tapes. It is expected that the full program will be tested by the end of 1966.

During the year, new surveys of employment were introduced covering hospitals, elementary and secondary schools, universities and private schools, to fill gaps in the community services sector. This development represents a substantial advance towards the objective of covering in the monthly estimates the total non-agricultural industrial employment.

In co-operation with the Economics and Research Branch of the Department of Labour and in consultation with the Canadian Labour Congress and the Canadian Manufacturers' Association, a mail survey of "Employer Expenditures for Selected Employee Benefits" (fringe benefits) has been planned, to be carried out in May 1966. This test survey which was undertaken as a result of widespread demands by both management and labour, to provide information regarding non-wage labour costs, will cover 150 industrial establishments in manufacturing and will provide the basis for establishing the feasibility of full-scale surveys in 1967 or later.

The Unemployment Insurance and Pensions Section compiles and publishes statistics reflecting the operations of the Unemployment Insurance Commission and the National Employment Service. In addition, a program of private pension plan statistics is carried on. During 1965-66, following a series of meetings of the Interdepartmental Committee on Pension Plans, a major survey of coverage of some 16,000 pension plans in Canada was developed and carried out in order to establish basic statistics immediately prior to the introduction of the Canada and Quebec Pension Plans. These statistics will provide essential benchmarks by which to measure the impact over time of the Canada and Quebec Pension Plans. Following consultation with the Canadian Labour Congress and other interested organizations, a program of research studies into the provisions of certain types of plans has been developed. In the annual trustee pension plan survey, significant data on segregated funds of insurance companies were established for the first time.

In the area of Unemployment Insurance Commission and National Employment Service statistics, all major series have now been converted to computer processing. Special studies were undertaken at the request of the Interdepartmental Committee on Unemployment Insurance studying amendments to the Unemployment Insurance Act. Technical assistance and advice was given to the Unemployment Insurance Commission and the Department of Insurance in surveys of agricultural employment designed for possible inclusion of this industry under unemployment insurance. A number of special studies were carried out for federal and provincial government agencies on such problems as small local office area data, insured employment in fishing and logging industries, duration of disqualification, growth of the insured population and long-term beneficiaries.

MERCHANDISING AND SERVICES DIVISION

By Census surveys every five years, and sample and special trade surveys annually, quarterly, monthly or weekly, as the need dictates, the Merchandising and Services Division produces statistics on retail and wholesale trade as well as a large number of the service trades. Information is obtained on the volume of business, inventories owned, number of people employed, payroll and other operating expenses, profit margins, credit extended, kinds of merchandise handled and services provided, the nature of markets served and size of business units. The structural characteristics of merchandising and service businesses are described and the identification of changes through time are emphasized in business structure, organization and practice. There are also periodic surveys covering topics such as advertising expenditures, the channels of merchandise distribution and consumer credit granted by financial institutions which require the extension of surveys somewhat beyond the limits of the merchandising and service trades.

During the year, the 1961 Census of Merchandising and Services was practically brought to completion and plans were begun for the 1966 Census. Thirty-six bulletins reporting the results of the 1961 Census were prepared

for printing. These included two retail and one service trade bulletin with establishment statistics; one retail establishment bulletin and the introductory and analytical review bulletins for retail trade; three wholesale bulletins dealing with location statistics and two dealing with establishments; six bulletins giving operating expenses of the service trades in considerable detail; a special bulletin reporting on certain transportation, storage and communication industries surveyed by the Census; a report on the channels of distribution and a market data handbook; fourteen bulletins showing wholesale gross margin and operating expense data; and the wholesale and services summary and analytical review bulletins.

The materials and procedures for the 1966 enumeration of merchandising and service trades were prepared during the year and plans were made for distributing the folios to enumerators. Preliminary drafts of census questionnaires were drawn up and discussions were held with the business community; as a result a start was made on the revision of the kind of business classifications. Publicity for the Merchandising Census was also planned.

In connection with current statistics, the standard monthly and quarterly series were maintained and published, the samples used being those devised from the Census of 1951. Developments in current statistical surveys brought about a 55 per cent increase in the mailing list of respondents in the year from about 53,000 to 83,000. Progress was made with the new retail trade sample based on the Census of 1961, but difficulties not anticipated a year ago have prevented the new sample from becoming operative. It is expected that monthly estimates will begin to flow from the new sample in the early fall of 1966. The difficulties are due mostly to the introduction of computer applications at all stages of the work including the preparation of monthly estimates, but this investment will result in long-term improvements in the statistics and resource saving. The reports on *Corporate Chain Stores* and *Shopping Centres* for the years 1961 to 1963, withheld because of the delay in releasing estimates from the new sample, were published with the necessary revisions. Annual reports on all the sectors of retail trade for years subsequent to 1961 will be released as soon as the new retail sample produces satisfactory results. The necessary revisions were made to the retail trade estimates for the 1951-1961 intercensal years to bring these into line with the results of the 1961 Census.

A new monthly sample survey of wholesale trade establishments is being designed. The sample will be drawn from the 1961 Census and will give somewhat more trade detail than the sample which has been projecting the 1951 Census results. An improved sample survey of restaurants is being instituted. These new samples should be producing estimates for publication by the end of 1967.

Regarding the retail trade operating results surveys, the first three-year cycle, designed to cover one-third of the trades annually, will finish with the 1965 survey. The food trades were surveyed for 1963; general merchandise stores, apparel and accessories stores, and the hardware and home furnishings group of stores were covered in 1964; the remaining trades, which include the

automotive group, drug stores and fuel dealers, are left to report for 1965. Where significant numbers of stores exist, data are collected for the trade in question and for three types of store operation, *i.e.*, corporate chains, voluntary affiliated independent stores and non-affiliated independent stores, which are often found to comprise the trade. By the end of the fiscal year 1965-66, the bulletin on the operating results of chain food stores for 1963 was published. More difficulties have been encountered with these surveys than was anticipated and response to questionnaires has been poor. During the year, some progress has been made in solving the problems and all the 1963 and 1964 bulletins should be published by the end of 1966. It should be noted that the operating results surveys cut across other regular surveys such as voluntary chain stores, independent retail stores and corporate retail chain stores. To avoid the adverse effect of double canvassing, the operating results questionnaires were designed to yield data required for the other surveys. Although it was the intention to extend the voluntary chain store survey to all trades where this mode of operation existed, survey difficulties have forced a temporary halt to this project. A concentrated effort is being applied to iron out the problems and present plans call for the publication of data on the food trades for the years 1963, 1964 and 1965 in one bulletin.

The 1964 reports on the established annual surveys of hotels, power laundries and dry cleaners and dyers, retail chain stores, shopping centres, vending machine operators and the occasional survey of funeral directors were a few months away from publication at the end of the fiscal year. Except as indicated in this report, all other reports on established annual surveys were published by the year end.

Development work continued on the wholesale trade annual survey. For 1964 the survey was extended to cover all types of wholesale operation, *i.e.*, co-operative marketing associations and other dealers in primary products, wholesale merchants, agents and brokers, manufacturers' sales branches and petroleum bulk tank plants and truck distributors. Towards the end of the year, reporting schedules were mailed to respondents to obtain data for 1965. The normal difficulties of instituting a new survey are being encountered but it is hoped that the initial report containing data for 1963 and 1964 will be published by the close of 1966.

Arrangements have been made to produce an annual report on advertising expenditures in Canada. The first will deal with 1964 and release is scheduled for mid-summer of 1966. It will be similar to former occasional reports on this subject with the one exception that internal advertising costs of firms, and advertising cost ratios by industry will not be available every year. Statistics on internal advertising costs entail a survey of about 20,000 respondents and plans have been made to carry out such a survey for the year 1965. Therefore, for 1965 the full range of data on advertising expenditures will be available.

The phenomena with which statistics deal must be rigorously defined and special attention was given to improve and bring up-to-date the definitions of voluntary chain stores, department stores and vending machine operators. In all cases, discussions are held with a wide range of experts and members of business and industry.

Work is continuing on the census monograph *Trends in Canadian Merchandising 1930-1961*, and it is expected to be ready for publication by the end of the next fiscal year. The Division has prepared an article on *The History of Retailing, 1867-1967* for incorporation in the special centennial volume. An article was prepared on *Shopping Centres in Canada* for publication in the Canadian Statistical Review.

The Research and Development Section continued the study of productivity in the distributive trades. A paper on the measurement of productivity with particular reference to retail trade was circulated among DBS officers. In addition, an intensive study of wholesale trade data is progressing. Research is being continued on employment and payroll statistics for the distributive trades with emphasis on deriving a satisfactory means of measuring labour input. The conceptual problems relating to the measurement of net distributive output were receiving special attention. A study is also being made of the changing commodity content of important retail trades and the significance of this for the channels of merchandise distribution. The Section is concerned with an analysis of changes taking place in the structure and performance of certain retail and wholesale trade institutions, e.g., the emergence of voluntary chain stores, discount houses, co-operative associations and the changes in the wholesale functions as performed by various intermediaries.

The joint use of merchandising statistics collected by other departments of government, both federal and provincial, has continued to receive attention. Lists have been received from the Alberta Provincial Bureau of Statistics which make it possible to check the 1966 Census enumeration of retail trade in that province. It is anticipated that before long Alberta and DBS will be able to co-operate fully in an annual survey of retail trade, eliminating the duplicating feature which exists where a provincial and federal department conduct similar surveys. Progress is being made for similar arrangements with Nova Scotia, New Brunswick, Prince Edward Island and Ontario but the point has not been reached where there is an interchange of data. Initial discussions have taken place with the remaining provinces and officers are encouraged by the interest shown in this project. The Division and the Quebec Bureau of Statistics are co-operating in the annual survey of hotels and it is now necessary for Quebec hotels to file only one statistical report in order to comply with the requirements of both provincial and federal surveys. The overall aim is to economize on statistical resources at all levels of government, thus reducing the necessary reporting by business.

NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS DIVISION

This Division, in its general responsibilities, is concerned with a wide range of economic statistics which includes the principal comprehensive statements and indicators relating to the Canadian economy. The preparation of these statistics for the publications which are described below involves the co-ordinating, processing and analysing of information from a variety of sources as well as some direct collection. The scope of information covered in these publications extends over the whole ambit of the organized output of

the Dominion Bureau of Statistics and beyond, providing a set of macro-economic data relating to the Canadian economy. The data are used by economists and others concerned with observing the course and performance of the Canadian economy and advising on policy.

In addition to the principal products of the Division which are the following publications, an important aspect of the Division's work is the provision of day-to-day assistance to many users. The regular publications include quarterly and annual reports on the National Accounts and Balance of Payments; annual reports covering a survey of production, foreign capital invested in Canada and Canadian capital invested abroad, as well as travel between Canada and other countries. Monthly publications include *The Canadian Statistical Review*; the *Index of Industrial Production*, including quarterly indexes of non-agricultural real output; *Sales and Purchases of Securities Between Canada and Other Countries*; *Travel Between Canada and Other Countries* and *Travel Between Canada and the United States*. *The Canadian Statistical Review*, with its supplements, is the most comprehensive of the monthly publications, being the medium for presenting a selection of Canadian statistics from the whole range of information encompassed in the various fields covered in the Bureau's activities and from other sources. It also contains an article each month reviewing developments in special fields of Canadian statistics and, as well, it is a leading channel for the public presentation of monthly seasonally adjusted series produced in the Current Business Indicators Section.

Recent extensions of government activity in the sphere of economic analysis and investigations have augmented demands for macro-economic data produced in the Division such as the national accounts and real output. These data and many supplementary series relating to them, including seasonally adjusted series, are parts of the systems of economic intelligence used by official groups concerned with considerations of long-range economic problems as well as of more current trends. The meeting of these new requirements for data as well as the continued assessment and use of new statistical data originating in other divisions of the Bureau in the construction of economic accounts has been absorbing increasing resources. For example, the development of statistics of financial flows involves frequent consultations and is leading to reassessments of certain aspects of the economic accounts already developed. Growing public interest in the presentation of government accounts in a national accounting framework has also drawn more attention to these statistics. In addition, new research by the United Nations and other international groups has been leading to intensive reappraisals of the interrelationships of all macro-economic statistics with the object of extending their usefulness in economic analysis.

In the balance of payments field, there has continued to be close public attention to statistics relating to this subject. Contributing to this have been the passage of the Interest Equalization Tax legislation in the United States in 1964 with the granting of exemptions to Canadian new issues; the change in the position of sterling in the latter part of 1964; and later the announcement in February and December 1965 by the United States authorities of guideline

measures designed to bring the United States balance of payments more into balance. As a result of this international background, normal demands for balance of payments information have been increasing.

The principal recent developments in information in the balance of payments field have been some extensions in data relating to short-term capital movements and the quarterly publications of the geographical distribution of net movements of capital. These developments proved to be particularly timely in 1965 when certain groups of international capital movements were under close observation as a result of the United States guidelines, changing money markets, and the directional shifts of capital flows. The preparation of an historical volume containing revised statistics on the balance of payments and international investments is continuing.

In the field of travel statistics new monthly details are now available on the countries of origin of non-immigrant travellers to Canada from overseas countries, and new arrangements have been introduced for sampling the expenditures of Canadian travellers returning from the United States. International investment records are being jointly used with the Industry Division in assembling statistics relating to manufacturing in plants owned by foreign controlled companies.

PRICES DIVISION

The function of the Division is to collect, compile and publish data on prices and consumer expenditure. The principal emphasis in the prices program is on the construction and publication of price indexes, but data on average prices are also published for selected commodities. Surveys of consumer expenditure are conducted biennially to provide a basis for revising the item content and weights in the Consumer Price Index. The resultant body of information on expenditures of Canadian families is published and widely used by business organizations and welfare agencies.

During 1965, the Division was reorganized and now consists of six sections. The terms of reference for the Retail Prices, Consumer Expenditures and International Prices Sections remains essentially unchanged. The Central Research group which is responsible for formulating and co-ordinating divisional programs of research and development, was officially designated a section. Expansion in the scope and form of industry and commodity wholesale price statistics relating to capital expenditures, manufacturing and agriculture gave rise to the necessity of co-ordinating and integrating this aspect of the Division's work. As a result, the Wholesale Prices and the Farm and Special Purpose Prices Sections have been re-organized on a functional basis. The new Wholesale Prices Section encompasses the professional staff responsible for developing and analyzing wholesale price statistics. The Price Surveys and Operations Section comprises the professional, technical and clerical staffs engaged in implementing and maintaining price surveys, evaluating reported prices for comparability, and carrying out the continuing production of all wholesale price indexes.

The regular monthly issues of *Prices and Price Indexes*, which include all price statistics published by the Division, and the earlier released monthly issues of *Price Movements* in which selected sensitive price indexes are first published, were continued. Publications of a non-continuous nature are described in the following reports for the various sections of the Division.

The price collection and compilation program in the Retail Prices Section was strengthened in two major respects in the fiscal year 1965-66. Firstly, attention was focussed on field operations through a series of meetings with the field staff involving intensive review of commodity specifications and of enumeration procedures. Particular emphasis was placed on the role of part-time enumerators, in anticipation of the more routine aspects of price collection being performed by them. This would allow the permanent staff to devote more attention to the complexities of modern merchandising and related market changes which, in turn, will result in improved price reporting.

The second aspect of the retail prices program which received special attention during the year under review was the application of mechanical data processing. This changeover involved the development of specially designed price schedules and the preparation of special programs to calculate the Consumer Price Index and to simultaneously produce much additional valuable price information. As a part of the mechanization program, particular attention was paid to staff training to facilitate the conversion from hand tabulation procedures. This change in data processing methods, initiated during the current period, is part of a continuing conversion to more modern techniques.

Three special studies were undertaken during the year. These included special food pricing in two major cities; special regional price comparisons in Manitoba, British Columbia and Alberta and the initial analysis of 1962 Urban Family Food Expenditure data to provide a basis for updating the "basket" used in Consumer Price Index calculations.

Activities in the Family Expenditure Surveys Section centred around the processing of the 1964 survey which had been conducted early in 1965. It is expected that tabulations from this survey, which referred to families and individuals in eleven urban centres, will become available in the second half of 1966. No surveys were undertaken during the year under review. Planning was begun for an experimental survey program in 1967, in which efforts will be concentrated on evaluating alternative methods of data collection, as a first step towards preparation for a national survey. The Chief of the Section spent a short time in England visiting the departments concerned with family expenditure surveys in order to obtain first-hand information concerning the United Kingdom program of continuing surveys in all its phases, and with particular reference to the effectiveness of the account-book method in relation to specific uses.

Two publications on family expenditures were issued in the year under review, *Urban Family Food Expenditure 1962* and *Farm Family Living Expenditure 1958*. A third report containing results from the 1962 survey of the complete family budget was in preparation. The 1962 surveys, taken for the

purpose of updating expenditure patterns for use in revising the Consumer Price Index, referred to a restricted group of families in seven major cities. The report on farm family living expenditure presented data obtained from the 1958 Farm Expenditure and Income Survey, conducted under the direction of the Agriculture Division. For the first time in twenty-five years, information on the living expenses of farm operators' families were made available, along with comparisons of farm and urban expenditure patterns.

The International Prices Section, during the year under review, organized and analysed detailed surveys of comparative living cost conditions at forty-five foreign cities to establish appropriate allowance levels for Canadian Government personnel serving abroad. In addition, for more than one hundred other foreign centres, the results of previous comparative living cost studies were reviewed and updated. In connection with this work, officers of the Section visited Canadian overseas offices throughout Latin America and the Caribbean area. In addition, the Section carried out a survey on behalf of the Department of National Defence, of the accommodation costs being experienced by military personnel serving at various bases in Western Europe.

During the 1965-66 fiscal year the Wholesale Prices Section carried forward the revision of Industry Selling Price Indexes relating to manufacturing to a 1961 price reference and weight base. The number of prices included in each industry index has also been expanded. The feasibility of producing selling price indexes relating to the establishment for use as deflators in Industrial Output and Productivity programs was studied intensively, as a preliminary step to producing them on a continuing basis.

Annual price indexes relating to distribution systems, transmission lines and transformation switching stations, components of the Electrical Utility Construction Price Index will be published in late 1966. The reference paper will include data covering the period 1956 through 1965 on a 1961 time base. Revised Highway Construction Price Indexes on a 1961 time base will be published in the 1966-67 fiscal year, for Newfoundland, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan and British Columbia. The development of such indexes relating to Quebec and Alberta is in progress. A revision of the price sample for the Residential Construction Price Indexes was begun in the year under review, to obtain regional price coverage reflecting wholesale or manufacturers' sales to residential construction.

The Index of Prices Paid by Farmers will be produced and published monthly instead of three times a year as at present. The item content and weights relating to farm operation inputs have been updated. As a consequence, the revision of the index was pursued during 1965-66 with particular emphasis placed on the revision of price samples.

The organization of the new Price Surveys and Operations Section was undertaken in the 1965-66 fiscal year on the basis of functions performed. The responsibilities for screening prices and for calculating wholesale price indexes were separated to afford more specialization and efficiency in both areas. The resultant intensified program of commodity intelligence undertaken by the commodity specialists within the Section will facilitate the evaluation

of reported prices for comparability and improve the reliability of the ensuing wholesale price indexes. Apart from the advantage of increased efficiency in the production of indexes at the present time, the centralization of calculations is a necessary step towards the conversion of such operations to computer processing.

The questionnaires used in the collection of prices in the Industry Selling Price Indexes and in the General Wholesale Price Index were revised to promote an awareness in respondents to these goals and thus to facilitate their attainment.

SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for all field survey activities of the Dominion Bureau of Statistics. The Regional Offices employ some 800 part-time interviewers, located throughout all parts of the country, who interview a scientifically selected sample of some 34,000 households each month, to obtain current information on labour force activity and related matters. In addition, regular staff members collect monthly data on retail prices and services for the use of the Prices Division in compiling the Consumer Price Index. Business establishments are also contacted in connection with the completion of reports required by other divisions of the Bureau. Each office also maintains a file of all current DBS publications for the convenience of users of DBS data in that region.

In the monthly Labour Force Survey referred to above, questions on labour force activity are asked and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five main regions of the country. At the same time, enumerators enquire about rents paid and the information so obtained is used to compile the rent components of the Consumer Price Index. From time-to-time special questions are added to obtain a variety of other information. In the May 1965 Survey, questions dealing with household facilities and equipment available in Canadian homes were asked. In the September 1965 Survey, at the request of the Department of National Health and Welfare, questions dealing with the smoking habits of Canadians were inserted. In the October 1965 Survey, questions dealing with residential and job mobility were included. In January 1966, questions dealing with education were asked – the level attained, the provinces where schooling was obtained and the level attained by parents. In March 1966, questions on income were included.

During 1965 the task of completely redesigning the sample frame, from which the labour force sample is drawn, was finished. This project was started during 1963 and was completed, province by province, over a period of about two years. The new sample frame makes use of 1961 Census data and incorporates a number of new technical features which together have improved its efficiency and accuracy. Before being adopted in each province, the new sample design was completely field-tested over a three-month period and detailed comparisons were made of the results obtained from the new sample and the old.

One important feature of the new design is the ease with which it lends itself to modification as abnormal shifts and growths in population occur over time. The new sample design automatically reflects population growth. However, this can be more accurately done under the new sample design by means of simplified procedures for modifying the sample in those city areas experiencing heavy new residential construction. In most large cities, large apartment buildings are sampled separately and as new ones are constructed, sampling is automatically extended to cover them also.

In all Regional Offices during the last six months of the fiscal year, additional positions were established to carry out preparatory field work for the 1966 Census of Canada to be conducted in June. This work involved the clarification of Enumeration Areas boundaries and the interviewing of candidates for appointment as Census Commissioners.

DATA PROCESSING SERVICES

The large scale processing of statistical data at the Dominion Bureau of Statistics is undertaken by the Tabulating Services Division in conjunction with the Central Programming Division. The two Divisions work together to improve the processing services of the Bureau using the equipment most suitable for the purpose. A senior committee, under the chairmanship of the Dominion Statistician, meets monthly and guides the allocation of computer and programming time. Long-run schedules for computer utilization are being developed in order to ensure orderly utilization of these facilities and to ensure proper priorities.

Tabulating Services Division

The subject-matter divisions of the Bureau gather data which form the basis for statistical tables and the Tabulating Services Division provides a service, using a variety of methods, to process the data reducing it to more manageable form for further analysis.

When aggregates only are required involving a minimum of cross-classification, they are produced directly as a clerical operation by means of peg-bar methods of compilation using comptometers and desk calculators. This group of operators handles a considerable volume of data, particularly where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work, as well as special projects involving more complicated calculations.

Many of the Bureau projects involve more difficult manipulation of the data and a number of more complex cross-classifications. For these, the Division uses a wide variety of unit record (punched card) equipment and electronic computer systems. Operators record the data from the source documents onto punch cards, about one half of them punching the cards and the other half verifying them independently for accuracy. Editing of the data by mechanical means and seeking out inconsistencies, which may arise through misinterpretation of instructions and definitions governing the collection of data, as well as errors in recording answers, are important functions

of the unit record sections and the computer centre. Before the actual tabulation of the totals, the punch cards or records on magnetic tape must be grouped and classified by the various characteristics of the data.

The greater part of the time on the installation is allocated to the work of the Dominion Bureau of Statistics. However, some requirements of other government departments and agencies have been accommodated. On the other hand, the Bureau has made use of computer facilities at other installations where they were more suited to particular applications. These arrangements are made through the Central Data Processing Service Bureau. The DBS installation consists of an IBM 705 computer system and two IBM 1401 computer systems with support equipment consisting of punch card equipment, such as sorters, reproducers, collators and card proving machines. All but two of the punch card tabulators formerly used in the Division have now been released. Throughout the year, the computer operations were on a 24-hour day, 5-day week basis with some week-end work as well, yielding a total of 5,100 productive hours on the 705 system and 10,600 productive hours on the 1401 systems. During the year, approximately 31,000,000 punch cards were used and about 2,200,000 sheets of original tabulations were produced.

The technique of using a medium-sized computer to simulate the action of various types of unit record equipment was exploited and refined during the year. Now almost all work formerly accomplished on unit record tabulators has been transferred to the new processing methods. Some processing timetables were dislocated to a small degree but the transfer is now complete and the service provided is either equivalent or better with a decrease in operating costs. This technique, developed within the Dominion Bureau of Statistics provides a satisfactory transitional method until programmer time is available to program a continuing operation. It is also an effective method for handling one-time applications where programming effort would be excessive in comparison with machine time.

In addition to the regular projects of the Bureau, a number were undertaken for other government departments and agencies on a cost-reimbursement basis under individual agreements.

Central Programming Division

The principal functions of the Central Programming Division are systems analysis in collaboration with subject-matter divisions, and programming for projects approved as computer applications by the DBS Electronic Computer Committee. In some cases investigation indicates that punch card or other methods of processing can produce the desired product just as timely and more economically than could be done by computer processing. An attempt is also made to eliminate routine types of manual editing, coding and other clerical operations by substituting computer processing, thus freeing clerical staff for other aspects of statistical data collection, processing, analysis and publication.

The Central Programming Division wrote a total of 470 programs in Fortran, Cobol and Autocoder languages during the year under review, to be

run on the DBS computer installations as well as on the IBM S/360 computer at the National Research Council and the CDC 3400 computer at the University of Montreal.

The Division consists of two sections: the Data Programming Group and the Scientific Programming Section which works closely with the Sampling and Survey Research Staff, the Research and Development Staff and economists and statisticians in subject-matter divisions, to produce and modify a variety of programs for analysis of tabulated data, seasonal adjustment of time series, and the institution and improvement of sampling technique. During the year approximately thirty per cent of the division's resources was expended on the work of the 1961 and 1966 Censuses; sixty-two per cent on other DBS applications and eight per cent on non-DBS requests.

In order to meet programming commitments for the 1966 Census of Canada, it was necessary to curtail or delay some 1961 Census requests for special cross-classification tabulations. Programming for 1961 Census monograph requirements was completed during the year but requests for special tabulations from Provincial Governments, Metropolitan Area Planning Boards, and Federal Government Agencies still continue as do requests for summary record tape files.

A Computer Applications and Requirements Committee within DBS was established during the year with senior members of the programming staff assuming major responsibility for assessing DBS computer requirements projected over the next ten years.

Programming resources continue to be a limiting factor. Expansion in government as well as industrial computer installations has increased the demand for programmers. During the year under review, there were fourteen additions and seven separations to the staff. DBS continues to co-operate with the Civil Service Commission in providing training to untrained personnel obtained through "trainee competitions". These potential programmers naturally develop more slowly than persons with previous experience and place a heavy burden on the senior staff to provide "on-the-job" training.

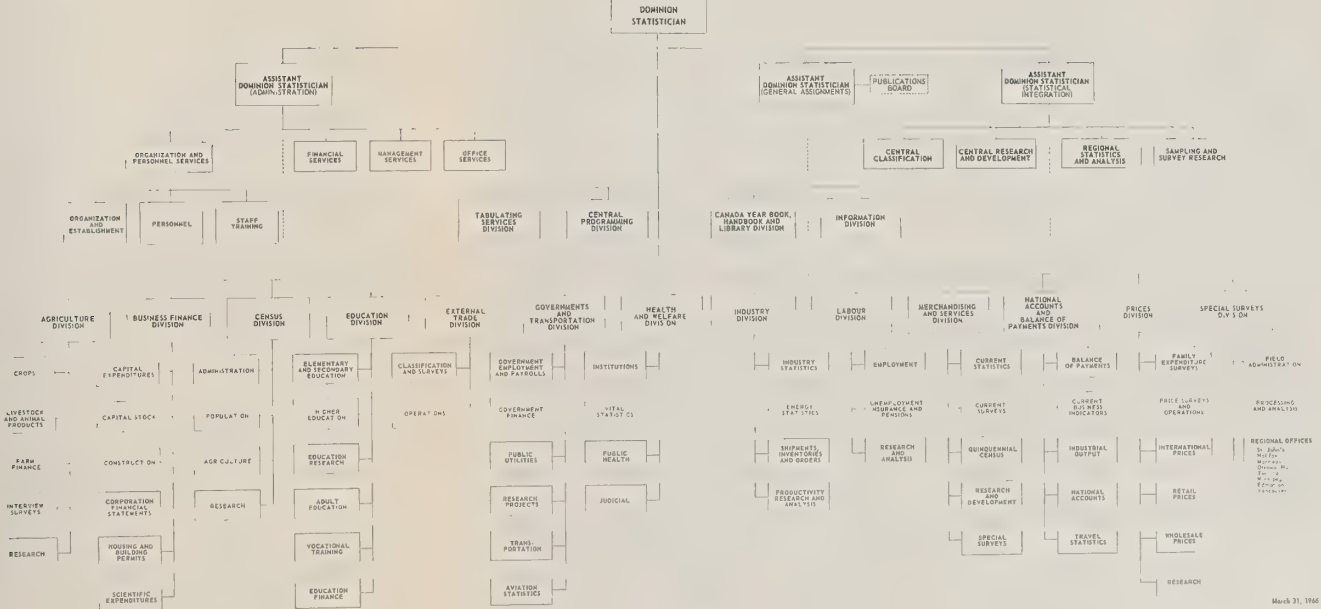
During the year under review, Cobol courses were given to approximately half the staff, and six experienced programmers and analysts attended basic programming courses on the IBM S/360 computer.

An official from the Greek Government, who was interested in the problems connected with setting up a computer centre for statistical services, especially for a national census, spent three weeks with the Central Programming Staff in DBS.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including administration, staff organization, financial control, management analysis, publications distribution and office services such as the addressograph unit, drafting unit, stenographic pools, supplies, mail and messenger services.

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION



March 31, 1966

DOMINION BUREAU OF STATISTICS
CHART SHOWING ORGANIZATION
March 31, 1966

Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel and Organization and Establishment Sections. In carrying out these functions it is necessary to maintain close liaison with the Civil Service Commission on recruitment, pay, promotions, transfer and related matters.

The staff employed on continuing operations at March 31, 1966 numbered 2,248, an increase of 191 from the number employed on March 31, 1965. During the year, 61 statisticians and economists were recruited and 39 were separated. There were 39 research assistants engaged on summer projects. Throughout the year 228 promotional competitions were conducted. The 1961 Census temporary staff at Head Office, which numbered 107 on March 31, 1965, was reduced to 41 by March 31, 1966. There was also a temporary staff of 183 engaged on preliminary work for the 1966 Census on March 31, 1966. The establishment authorized for the fiscal year was 2,360 positions and 53 man-years of casual clerical assistance for continuing operations, 40 man-years for 1961 Census processing, and 136 man-years for 1966 Census work.

Staff training and development continued with the DBS Training Officer acting mainly as an adviser to line management on employee development and related activities, and on technical training at the divisional level. He is also responsible for directing supervisory and management development programs and participates in management consultation activities, as well as employee relations, counselling and guidance activities.

The Health Unit, a branch of the Civil Service Health Division of the Department of National Health and Welfare, continued to provide an industrial nursing service for employees.

Management Services

During the year a Management Services Section was established for the purpose of providing a specialized analytical service to assist officers of the Bureau in improving the efficiency of their statistical processing operations. A number of projects have been undertaken, principally in the area of integrating manual clerical operations with electronic data processing and other forms of mechanization.

Suggestion Awards

During the year, 56 suggestions from DBS employees were considered by the Suggestion Award Committee of which 27 were carried forward from the previous year. Of these suggestions, four were approved for awards valued at \$265.00 with an estimated saving to the Bureau of \$2,828.00. At the end of the year ten suggestions were still under investigation.

Financial Services

This section consists of two units, one concerned with the financial operation of the Bureau including the co-ordination of the estimates; the second is concerned with the sale and distribution of Dominion Bureau of Statistics publications.

The Accounts Unit examines and controls expenditures, audits travel claims and commercial accounts, compiles cost distribution statements and interprets financial regulations. The 1966-67 financial estimates were prepared on both standard object and program basis as a trial run for the eventual complete control on a program basis.

The Publications Distribution Unit maintains current mailing and subscription lists for distribution of publications. During the fiscal year under review, the unit dispatched 1,321,751 individual pieces of mail and received 19,848 mail orders. The subscription mailing list now contains 167,000 addressograph plates.

Office Services

In April 1965, the Typing and Transcribing Services Section included four typing units, one on each floor of the DBS building to service a pre-determined number of subject-matter divisions. In August 1965, a fifth typing unit was established and located in Number 8 Building to service the Census Division. All units are operating under a line-count system whereby production is expressed in terms of lines typed. The number of lines produced in these units totalled 6,723,588. The number of lines produced by assigned staff outside the units totalled 558,854.

The Printing Liaison Services Unit, in addition to maintaining liaison with the Vari-type and Printing Sections of the Canadian Government Printing Bureau situated at DBS, is responsible for examining manuscript of DBS publications being submitted for composition and advising on layout, format, standards, stock and binding of publications as well as co-ordinating workflow and assigning printing priorities. Records of printing progress of the publications are kept from the original requisition through proofreading, meeting deadlines to the finished product. During the 1965-66 fiscal year, this Unit processed and prepared for printing 16,690 pages of copy.

The Office Services Section prepared various layout studies of the DBS building and Number 8 Building in order to accommodate the staff.

The Drafting Unit prepared 2,401 economic charts, maps, diagrams and various illustrations for the divisions of the Bureau and other departments and agencies of the Government. In addition, the Unit completed a series of charts for the Royal Commission on Health Services as well as a series of colour wall charts for the Centennial Commission.

During the period under review, 662,621 photocopies were completed to fill 23,290 requisitions in the Xerox and Banda Duplicating Unit.

In the Forms Design Unit work continued on the simplification, standardization and revision of forms and publications. During the year under review, the Unit processed 3,669 forms consisting of 11,940 pages of reprints, revisions and new or redesigned forms. In addition, 518 specialty forms and envelopes were prepared and 2,275 other miscellaneous printing jobs processed.

In the Addressograph, Mail and Supplies Unit 19,375,657 forms were addressed for the various divisions of the Bureau. In addition, 309,658 plates were embossed, 141,647 corrected and 308,614 deleted. In addition 236,629 pieces of mail were enveloped by hand and 3,050,900 were inserted by machine.

During the year 25,815 bags of mail were deposited with the Post Office and 8,531 were received. In addition to the general mail addressed for delivery in Canada, 10,241 pieces of registered mail, 15,477 air mail, 956 special delivery, 5,956 parcel post and 93,928 foreign mail were dispatched. Also included in mail dispatched were 2,188 bags containing 4,645,287 letters for the Department of Agriculture.

The Supplies Unit submitted 1,031 printing and stationery requisitions to the Department of Defence Production, for an estimated value of \$726,247. The supplies inventory as at March 31, 1966 was \$34,085; the annual stock turnover rate, therefore, was 21.3. Replacement value of DBS office machine and equipment inventory, based on original cost, was \$706,382.



ANNUAL REPORT

Government
Publications

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Government
Publications

